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ABSTRACT

The research methods, procedures, and data for determining the impact of 10 fine arts institutions on the Minneapolis-St. Paul economy (1978) are outlined. A 30-equation model was used to identify a variety of effects on local businesses, government, and individuals. Researchers examined internal records of the 10 institutions as well as local, state, and federal records. Audience research and staff surveys were also conducted. Divided into four sections, the report discusses data collection instruments and general procedures, local data collection procedures, local data summary, and weighting and estimation techniques. Subtopics in each section are the audience survey, staff survey, institutional data inventory, community data inventory, and tax-related data. Appendices provide audience survey dates and response rates, instructions to the study coordinator for annotating budget and functional expense statements and institutional data inventory, community data inventory, instructions for developing a calendar which depicts sampling dates, and documentation protocol. All research instruments are included and most instruments provide numerical results of the research. (KC)

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TECHNICAL SUPPLEMENT TO THE ECONOMIC IMPACT OF TEN CULTURAL INSTITUTIONS ON THE ECONOMY OF THE MINNEAPOLIS-ST. PAUL SMSA

VOLUME I

[and] Volume II--Appendices.

1980

The Johns Hopkins University
Center for Metropolitan Planning and Research

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TABLE OF CONTENTS

	Page
LIST OF EXHIBITS	i
PREFACE: ORGANIZATION OF THE REPORT	ii
SECTION I: DATA COLLECTION INSTRUMENTS AND GENERAL PROCEDURES	1
A. Overview	1
B. The Audience Survey	2
C. The Staff Survey	8
D. The Institutional Data Inventory and Annotation of Expenses	8
E. The Community Data Inventory	12
F. Additional Documentation	12
SECTION II: LOCAL DATA COLLECTION PROCEDURES	14
A. Overview	14
B. The Audience Survey	15
C. The Staff Survey	18
D. The Institutional Data Inventory	19
E. The Annotation of Expenses	20
F. The Community Data Inventory	20
SECTION III: LOCAL DATA SUMMARY	22
A. Overview	22
B. Audience Data Summary	22
C. Institutional Data Summary	24
D. Employee Data Summary	26
E. Tax-related Data	28
F. Other Community Data	32
SECTION IV: WEIGHTING AND ESTIMATION TECHNIQUES USED IN THE STUDY	36
A. Overview	36
B. Audience Data	36
C. Employee Data	37
D. Institutional Data	38
E. Community Tax-related Data	39

LIST OF EXHIBITS

		Page
Exhibit 1	Audience Questionnaire.....	3
Exhibit 2	Survey Event Report Form.....	6
Exhibit 3	Staff Survey Instrument.....	9
Exhibit 4	Audience Data Summary.....	23
Exhibit 5	Institutional Data Summary.....	25
Exhibit 6	Employee Data Summary.....	27

PREFACE: ORGANIZATION OF THIS REPORT

This technical supplement provides additional information on the research methods and procedures used to develop case studies of the economic effects of forty-three arts and cultural institutions in the following six U.S. cities*:

Columbus, Ohio
Minneapolis/St. Paul, Minnesota
St. Louis, Missouri
Salt Lake City, Utah
San Antonio, Texas
Springfield, Illinois

The history and purpose of this six city project is briefly reviewed as part of each case study report.

The case studies utilized a thirty equation model to identify a variety of effects on local businesses, government and individuals. Data was required from the internal records of the examined institutions as well as from local, state, and federal sources. Audience research was also required as was a survey of each institution's staff.

Instruments and procedures relevant to the collection of these data were developed by staff of the Center for Metropolitan Planning and Research of The Johns Hopkins University (Metro Center). Training seminars for local study staff were conducted in Baltimore and additional procedures developed to document and monitor the management, implementation, and quality of local data collection efforts.

Section I of this technical supplement describes data collection instruments and general procedures. Section II describes the management and implementation of procedures by the Twin Cities Metropolitan Arts Alliance staff.

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*The study sponsors in each city were The Greater Columbus Arts Council, Twin Cities Metropolitan Arts Alliance, Springboard, The Utah Arts Council, The Arts and Education Council of Greater St. Louis, and the Arts Council of San Antonio.

Data quality issues are also reviewed. Section III presents the data utilized to arrive at estimates of economic effects. Section IV describes weighting and other relevant data handling issues. Separate appendices provide data on the audience survey dates and response rates, instructions and relevant protocols, and other matters on interest.

SECTION I: DATA COLLECTION INSTRUMENTS AND GENERAL PROCEDURES

A. Overview

The case studies described in this technical supplement were developed in partnership with local arts agencies in the six U.S. cities noted earlier. Each agency was responsible for the local study conduct following procedures developed at the Metro Center and piloted in Baltimore.* Study Coordinators were selected by each partnership agency and included a graduate student intern, a private consultant, agency staff persons, and a professor at a local college. Staffing arrangements and local management procedures in Minneapolis-St. Paul are described in Section II.

Coordinators from each city participated in workshops held in Baltimore at the Metro Center from October 11-13, 1978. These workshops were developed to orient study coordinators to all phases of the data collection process. Supplemental materials specific to the conduct or documentation of each data collection procedure were developed and forwarded as procedures were implemented. Attention focused initially on the audience survey. Subsequently, materials were developed and forwarded to each city dealing with procedures for the staff survey, for identifying local spending and gathering requisite data from each examined institution, and for gathering requisite community data from local, state, and federal documents or other data sources (e.g. local data bases).

The ability of each city to undertake these tasks simultaneously was materially affected by constraints in study coordinator time, the ongoing

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*Cf. David Cwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

availability of other local study staff, and cooperation from local agencies. In the interest of data quality, agencies were encouraged to engage in only those data collection efforts that could be successfully managed by local study staff. Consequently, at any point in time the cities may have been engaged in differing aspects of the data collection effort, necessitating constant monitoring by phone of progress and problems encountered. Documentation and quality control procedures are described below as part of our review of each data collection procedure.

B. The Audience Survey

The audience survey required the development of self-administered questionnaires, implementation procedures and management plans, sampling frames and procedures, documentation procedures, and data handling procedures relating to the editing and keypunching of questionnaires.

Audience questionnaires and procedures reflected the Baltimore pilot study and were designed to allow each city to add additional questions. Survey management procedures are described in Section II below. Exhibit 1 presents the questionnaire as utilized in Minneapolis-St. Paul.

Prior to the October orientation workshop noted above, study coordinators gathered requisite data for each event/day during the survey period. This included projected attendance by performance (for performing arts groups) and event day (for museums and other groups). Separate sampling frames were developed for each of the forty-three participating institutions and reviewed with study coordinators at the October workshop. (Sampled event days for each institution together with other relevant information are presented in Appendix A.)

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Exhibit 1

AUDIENCE SURVEY

The Twin Cities Metropolitan Arts Alliance with assistance from the National Endowment for the Arts and The Johns Hopkins University is conducting a study of audiences for selected cultural activities. We appreciate your cooperation and hope that you will fill out the following questionnaire. Your responses are totally anonymous. Please do not identify yourself in any way. Thank you:

Instructions: This form contains two types of questions. Some are multiple choice questions: for them, write in the box provided the number corresponding to your answer. Other questions request information which you should simply write in the box provided (e.g., your zipcode). Please fill this form out by yourself. Feel free to consult other people in your party.

city (SMSA code) 5120

institution

performance

ANSWER FOR YOURSELF ONLY

Where do you live? (Write in number corresponding to the correct response.) (1) City of Minneapolis (2) Hennepin Co. (outside City of Minneapolis) (3) City of St. Paul (4) Ramsey Co. (outside City of St. Paul) (5) Anoka Co. (6) Dakota Co. (7) Washington Co. (8) Wright Co. (9) Scott Co. (10) St. Croix Co. (11) Carver Co. (12) Chisago Co. (13) Elsewhere in Minnesota (14) Elsewhere in Wisconsin (15) Another U.S. state (16) Outside of United States [ ] 17-18-19

How many years have you been living in the Twin Cities metropolitan area? (Write in corresponding number of years. If less than a year, write "1". Round to nearest year. Visitors to this area write "0".) [ ] 20-21

What is your present zip code? (Write in all 5 digits.) [ ] 22-26

What is your age? [ ] 27-28

How many people are presently living in your household? (include yourself) [ ] 29-30

How many years of education have you completed? (1) less than 12th grade; (2) high school graduate; (3) some college; (4) bachelor's degree; (5) graduate or professional degree [ ] 31

Approximately how many miles one-way did you travel to get here? (If less than a mile, write 1. Round to nearest mile) [ ] 32-33

IF YOU HAVE A SINGLE TICKET OR A SINGLE ADMISSION for this event, how much did it cost? (Put in dollars and cents. If you do not know, write "0".) $ [ ] 34-37

FOR PERFORMING ARTS ONLY

IF YOU HAVE A SUBSCRIPTION to this series, what was the price of your subscription? (If you do not know, write "0".) $ [ ] 38-40

ANSWER FOR YOUR ENTIRE PARTY

Including yourself, how many people are in your party? [ ] 41-42

Other than the cost of admission, approximately how much money did you and your party already spend or anticipate spending in connection with today's event? (Write in the appropriate amount in each category; please write in zero if no money was spent in a category.) On:

Public transportation (taxi, subway, bus, train, etc.)? $ [ ] 43-46

Restaurant and bar outside institution (food, cocktails, beverages, etc.) $ [ ] 47-50

Restaurant, bar or gift shop inside institution? $ [ ] 51-54

Lodging (hotel/motel)? $ [ ] 55-58

Parking? $ [ ] 59-62

Babysitters? $ [ ] 63-66

Other? $ [ ] 67-70

FOR OUT-OF-TOWN VISITORS ONLY

When you were making plans to come to this community, did you expect that you would be attending this cultural event or institution? (1) Yes; (2) No [ ] 71

IF YES, was it your sole reason for coming to this community? (1) Yes; (2) No [ ] 72

How many nights will you spend in the metropolitan area on this visit? [ ] 73-74

How many people, including yourself, are with you on your visit to this area? [ ] 75-76

Approximately how many dollars do you and your party anticipate spending while in this area? $ [ ] 77-80

OVER

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Exhibit 1 (con't)

The following questions are concerned with your use and support of local cultural activities. Please answer all three questions for each institution.

	Question 1: Do you have a subscription ticket or have you purchased a membership? (1) Yes; (2) No	Question 2: Including today, how many times have you attended in the last 12 months? (Write "0" if you haven't attended in the last 12 months.)	Question 3: How many dollars have you contributed in the last 12 months, not including subscription fees, ticket costs or membership fees? (Please write "0" if you have not contributed in the last 12 months.)
Children's Theatre Company	2/16	19-20	$ 21-23
Chimera Theatre	24	25-26	$ 27-29
Cricket Theatre	30	31-32	$ 33-35
Guthrie Theater	36	37-38	$ 39-41
Minneapolis Institute of Arts	42	43-44	$ 45-47
Minnesota Dance Theatre	48	49-50	$ 51-53
Minnesota Orchestra	54	55-56	$ 57-59
St. Paul Chamber Orchestra	60	61-62	$ 63-65
Science Museum of Minnesota	66	67-68	$ 69-71
Walker Art Center	72	73-74	$ 75-77

If you purchased a ticket to this event, did you use a MAT Voucher? (1) Yes (2) No

Have you answered this survey before? (1) Yes (2) No

What is your marital status? (1) Single; (2) Married; (3) Separated or divorced; (4) Widowed 3/33

What is your sex? (1) Male; (2) Female 34

To which race or ethnic group do you belong? (1) White; (2) Black; (3) Mexican American or Spanish speaking; (4) Oriental; (5) American Indian; (6) Other 35

Last year, what was your total annual family income, before taxes? (1) Less than $4,999; (2) $5,000 to $9,999; (3) $10,000 to $14,999; (4) $15,000 to $19,999; (5) $20,000 to $24,999; (6) $25,000 to $29,999; (7) $30,000 to $49,999; (8) $50,000 or more 36

What is your present job status? (1) Employed full time; (2) Employed part time; (3) Unemployed 37

If employed, what is your main occupation? 38-77

This instrument was developed by the Cultural Planning Group of The Johns Hopkins University, Baltimore, MD 21218. Permission to use this instrument should be obtained from Dr. David Cwi.

Sampling frames used systematic sampling of individuals, assumed a 50% response rate, and sought to obtain no less than 500 completed questionnaires for each institution. Response rates of approximately 70% and higher were common in all cities. Audience study quality was uniformly high, with varied factors affecting the adequacy of sampling procedures at individual institutions, including overestimates of attendance, understaffing, and only one or a few institution performance days available for sampling during the study period. Issues that arose in Minneapolis-St. Paul that affected the sampling design for particular institutions are discussed in Section II below.

Implementation of the audience survey involved the distribution of an assigned number of questionnaires each event/day following procedures developed with local coordinators. These included briefing sessions reviewing the impact of entry/egress patterns on the choice of distribution sites. Typically, questionnaires were distributed separately but at the same time programs were distributed at performing arts events. In most cases, special survey teams were utilized rather than ushers or other institutional staff. Exceptions are noted in Section II. Collection of instruments occurred before the start of the program and during intermission--if a performing arts event--as well as at the close of the program.

To monitor the quality of the audience survey effort, local staff completed Survey Event Report Forms. These documented various aspects of survey implementation and focused particularly on matters relating to documenting the distribution of questionnaires and response rates. These reports were later checked at the Metro Center against final data tapes. Exhibit 2 presents the form utilized in each city.

Exhibit 2 -

JOHNS HOPKINS UNIVERSITY CULTURAL POLICY GROUP
SURVEY EVENT REPORT FORM

1. Event Control Number: |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|
(smsa) (inst) (date: yymmdd) (seq)

2(a) Institution Name: _____ (b) Regular Site? (Y or N) _____

3(a) Type of Event: _____ (b) Program Content: _____

(c) Featured artist(s) or group? (Y or N) _____

4(a) Event Starting or Opening Time: _____ (b) Event Ending or Closing Time: _____

5(a) Total Attendance: _____ (b) Estimate? (Y or N): _____

6 List of questionnaire control numbers allocated to the event: _____

_____

7 List of questionnaire control numbers distributed at the event: (answer this question only if you do not fill out question 10 below): _____

_____

8(a) Number of questionnaires returned: _____ (b) Response Rate: _____%

(c) Time Surveying Started: _____ (d) Time Surveying Ended: _____

9. Sampling Interval: _____

Exhibit 2 (cont.)

10. Questionnaire distribution data:

Distribution Location	Control Numbers Allocated	Control Numbers Distributed
(a)		
(b)		
(c)		
(d)		
(e)		
(f)		
(g)		
(h)		
(i)		
(j)		

11. Date Editing Done (yymmdd): _____

12. Questionnaire numbers rejected during edit: _____

13. Suspicious Questionnaires: _____

14. Comments: _____

The editing of questionnaires was conducted locally by study staff with keypunching in Baltimore and other sites. Local management plans for keypunching and editing are discussed in Section II. Local staff followed edit and keypunch protocols developed by the Metro Center. All questionnaires were forwarded to the Metro Center and a 10% sample inspected and compared to the data tape. This inspection examined editing quality and keypunch error rates. The keypunch error rate for each city is less than one-half of one percent (computed as the number of errors per item).

C. The Staff Survey

Procedures for the implementation of the staff survey and issues affecting data quality are reviewed in Section II below. The staff survey was self-administered and distributed to all staff whether paid or volunteer. Exhibit 3 presents the survey instrument usen in Minneapolis-St. Paul. Local staff edited the staff survey following protocols developed at the Metro Center. Keypunching was performed in Baltimore. Instruments were distributed by institution management together with return envelopes assuring confidentiality. Response rates varied dramatically by institution, necessitating various weighting and estimation procedures described in Section IV below.

D. The Institutional Data Inventory and Annotation of Expenses

Coordinators were provided with suggested procedures for securing requisite data from the internal accounts of examined institutions. These procedures sought to be responsive to institutional unwillingness to "open the books" for inspection and yet to gather data of sufficient

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city (SMSA code)	institution	year/month
5120		

Exhibit 3

STAFF SURVEY

The Twin Cities Metropolitan Arts Alliance with assistance from the National Endowment for the Arts and The Johns Hopkins University is conducting a study of the status and impact of selected cultural activities. We appreciate your cooperation in completing this questionnaire. BE ASSURED THAT ALL RESPONSES WILL BE KEPT IN STRICTEST CONFIDENCE. PLEASE SEAL COMPLETED QUESTIONNAIRE IN THE ATTACHED ENVELOPE.

Instructions: This form contains two types of questions. Some are multiple choice questions: for them, write in the box provided the number corresponding to your answer. Other questions request information which you should simply write in the box provided (e.g., your zipcode). Thank you!

QUESTIONS ABOUT YOURSELF

Where do you live? (Write in number corresponding to the correct response.) (1) City of Minneapolis (2) Hennepin Co. (outside City of Minneapolis) (3) City of St. Paul (4) Ramsey Co. (outside City of St. Paul) (5) Anoka Co. (6) Dakota Co. (7) Washington Co. (8) Wright Co. (9) Scott Co. (10) St. Croix Co. (11) Carver Co. (12) Chisago Co. (13) Elsewhere in Minnesota (14) Elsewhere in Wisconsin (15) Another U.S. State (16) Outside United States

How many years have you been living in the Twin Cities metropolitan area? (Write in corresponding number of years. If less than a year, write "1". Round to nearest year. Visitors to this area write "0".)

What is your present zip code? (Write in all 5 digits.)

What is your age?

How many people are presently living in your household? (include yourself)

How many years of education have you completed? (1) less than 12th grade; (2) high school graduate; (3) some college; (4) bachelor's degree; (5) graduate or professional degree

To which race or ethnic group do you belong? (1) White; (2) Black; (3) Mexican American or Spanish speaking; (4) Oriental; (5) American Indian; (6) Other

What is your marital status? (1) Single; (2) Married; (3) Separated or divorced; (4) Widowed

What is your sex? (1) Male; (2) Female

What is your present employment status at this institution? (1) full time; (2) part time; (3) non-paid full time staff; (4) non-paid part time staff; (5) CETA

During how many weeks of the year will you work at this institution? (write "0" if you do not know)

When you work at this institution, on average, how many hours a week do you work?

What percentage of your income -- exclude spouse -- is derived from employment at this institution?

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Exhibit 3 (con't)

QUESTIONS ABOUT YOUR HOUSEHOLD

How many children under 18 are in your household? [ ]

How many of the children in your household attend public elementary or secondary schools? [ ]

Do you live in a residence that you own or are buying? (1) Yes; (2) No [ ]

If you own your residence, or are buying, approximately how much do you pay in property tax? [ ]

What is the total annual income before taxes of all persons living in your household (including yourself)? [ ]
(1) Less than $4,999; (2) $5,000 to $9,999; (3) $10,000 to $14,999; (4) $15,000 to $19,999; (5) $20,000 to $24,999; (6) $25,000 to $29,999; (7) $30,000 to $49,999; (8) $50,000 or more

What percentage of total estimated household income is derived from employment at this institution? [ ]

For all members of your household, please estimate the amount currently kept in state banks, credit unions, and savings and loans: (1) 0 to $99; (2) $100 to $249; (3) $250 to $499; (4) $500 to $999; (5) $1000 to $2499; (6) $2500 to $4999; (7) $5000 to $9999; (8) $10,000 +

savings accounts [ ]

checking accounts [ ]

Below are a list of job areas associated with the operation of different types of cultural institutions. The job areas are divided into several categories for easier reference. Please select the duties that best describe your principal occupation. If more than one occupation, write in the number corresponding to the best description of your main occupation.

ADMINISTRATIVE

(1) Director/General Manager/Business Manager
(2) House Manager/Box Office/Department Heads
(3) Development/Public Relations/Fundraising-Membership
(4) Clerical/Secretarial

ARTISTIC PROGRAM/PRODUCTION

(5) Non-performing technical/managerial (set, lighting, wardrobe, costume design, props, casting)
(6) Performing: chorus, actors, musicians, conductor, dancers, etc.

EDUCATION/RESEARCH/OUTREACH

(7) Librarian/Editor/Photographer/Designer
(8) Instructor/Researcher/Curator/Conservator

SPECIALIZED SERVICES

(9) Maintenance/Grounds/Restaurant-Bar/Gift shop/Shipping
(10) Stagehands/Ushers/Box-Office/Guards/Security/Guide

[ ]

quality for study purposes. A principal concern was to identify non-salary expenditures made with local firms. Arts and cultural institutions are on the whole quite labor-intensive, so that it is often easy to identify the bulk of local expenditures since they take the form of salary and wage items rather than non-labor expenditures.

The volume and variety of non-labor expenditures was such that institutional personnel responsible for accounts payable could often be expected to have personal knowledge of the vendors for a considerable portion of non-labor expenditures. Appendix B presents the instructions adopted for annotating institutional budget statements. These instructions represent a three-part strategy of identifying the staff person in the examined institution most knowledgeable concerning accounts payable, seeking the most detailed statement of expenses, and requesting that institution staff name the local vendors with whom expenditures were made as a test of their judgement. When institutional staff did not appear able to accurately judge local vendors for particular categories or when it appeared unreasonable to rely on their judgement, invoices were inspected for the items in question. By relying on their personal judgement, it was felt possible to avoid the actual inspection of all or a sample of invoices. (This would require the design of sampling procedures responsive to each institution's bookkeeping procedures and would represent a marked increase in effort for each examined institution that local staff felt intolerable.) Inspection of invoices was avoided unless there was reason to believe that institution staff might be materially in error regarding their judgement of expenditures with local vendors.

Additional data on attendance, staffing, and other matters was provided utilizing an institutional data inventory. Appendix C presents

the form utilized by each institution. The exhibit includes a procedure for the sampling of checking and savings account balances using a random number table.

E. The Community Data Inventory

As part of the Baltimore workshop, study coordinators were oriented to requisite community data and likely local sources. Subsequently, coordinators were sent a Community Data Series Reporting Protocol to which was attached a revised Annotated Community Data Inventory intended to take account of the unique features of each community. These are presented as Appendix D.

The procedure required the provision of data and the documentation of sources. Subsequently, these community data items were forwarded by the Metro Center to local planning agencies and Chambers of Commerce for their review. Additional research by the Metro Center included the gathering of data from these sources as well as from federal documents on the economy, business and employment characteristics of each city.

F. Additional Documentation

Project data collection tasks described to this point included various documentation procedures. In order to develop for the record a comprehensive overview of study procedures, each study coordinator was asked to provide information on the management, organization and execution of each data collection and data handling task.

This documentation included the development of calendars for each surveyed institution indicating actual attendance on surveyed and other event days as well as other matters (cf. Appendix E). Appendix F presents the documentation protocol developed to identify matters relating to the

organization, management and execution of tasks, including circumstances that may have led to different practices on the part of individual institutions. This formal documentation, together with the ongoing evaluation based on our day-to-day contact with study coordinators, and the internal and external validity checks already noted (e.g., correspondence of SERF forms and data tapes, confirmation of community data by other local sources) were the basis for an institution-by-institution evaluation of data quality.

Section II below presents information on the organization and management of data collecton procedures in Minneapolis-St. Paul. Information relevant to an evaluation of data quality is also presented. Section III reviews data used in the study. Section IV reports on various weighting and estimation procedures required by the study.

SECTION II: LOCAL DATA COLLECTION PROCEDURES

A. Overview

In the first section of this technical supplement we described the general data collection techniques and basic research design tasks required of participants in the Partnership Cities Project. We also indicated the procedures used to evaluate and assure data quality. These procedures included ongoing correspondence and telephone contact with study coordinators in each city to review local management plans and approaches to data collection and otherwise assess progress and potential problems. These oversight and documentation procedures included a "for-the record" review by each study coordinator of the procedures employed in the conduct of each major data collection task and sub-task (cf. Appendix F which presents the Documentation Protocol). In Minneapolis/St. Paul this information was provided by William Driver.

We are most pleased to acknowledge the principal project staff at the Twin Cities Metropolitan Arts Alliance. William Driver, Managing Director of the Alliance, served as Study Director. His responsibilities included the coordination of the wide array of day-to-day tasks and responsibilities described in this technical supplement. Dr. Julien L. Phillips assisted in coordinating requisite audience studies. Exhibit 1 in the case study report lists the staff persons and volunteers identified by the Twin Cities Metropolitan Arts Alliance as individuals who actively participated in the study. The following section describes local data collection techniques and local study management.

B. The Audience Survey

Distribution and Collection

Survey procedures were generally consistent and were coordinated by Driver and Phillips utilizing supervisors at each examined institution. One institution (Chimera Theatre) had a staff member make an announcement from the stage. Distribution methods were the same at all ten institutions. Collection methods varied at two institutions (Walker Art Center and MIA) in that patrons were asked to return the surveys to a collection box rather than to a survey team member.

The normal process started at each event with the survey team meeting at the institution about fifteen minutes before the house doors opened. At that time, new team members received instructions on how to survey. Each team member received a packet of surveys, pencils, a badge, and a survey box (for completed questionaires), along with instructions on the sampling interval to be used and his/her position for distribution. At intermission, and again after the event, team members circulated in the lobbies to collect completed surveys. The team supervisor then collected all materials from the team members.

The process needed no monitoring, according to William Driver, because as team members became more practiced, the process proved so efficient that it monitored itself. The major difficulty was the need for more volunteers to aid in the survey process.

William Driver has noted a large number of constraints imposed on the audience surveying, including:

1) Overestimated attendance--institutions such as the Minnesota Orchestra Association had many more tickets sold than they had actual attenders.

2) Ineligible attenders--institutions such as The Children's Theatre had large numbers of children in the audience. At the Guthrie, many matinees had large groups of high school students. Metro Center protocols made these persons ineligible to be sampled.

3) Unwilling attenders--theatre matinee audiences (especially at the Guthrie) seemed to have larger than normal numbers of people who refused to take surveys from the surveyors.

4) Traffic problems--identifying museum attenders at the Walker Art Center and the Minneapolis Institute of Arts was often difficult due to the complex nature of these facilities. At the Walker, surveys were distributed only to people coming in at Gallery Level 1, and not to those who were only browsing in the gift shop or attending the museum restaurant. Traffic became confused when restaurant attenders came down through the Galleries. At the Minneapolis Institute of Arts, traffic was controlled at the museum entrance; however, some people came in only for the restaurant, the gift shop, or the Friends Gallery. The survey team tried to identify buttons for the various areas, maintain the sampling interval and survey only those people going to the museum.

   The St. Paul Chamber Orchestra performs in many facilities and often did not know in advance at how many locations tickets would be taken. This lack of information made it difficult to know in advance what size survey team was needed.

   Crowd control at Northop Auditorium (Minnesota Dance Theatre) made surveying extremely difficult. Three people standing abreast on a stairway, each handing in tickets for their parties who streamed past the team members during this process, made the surveying process very difficult. Maintenance of sampling intervals was very difficult at this facility.

   Traffic patterns were sometimes changed during ticket-taking. For instance, at the Guthrie Theatre, a third door is opened on the main floor if the crowd starts to build up.

Attenders asking questions about the survey created traffic problems and sometimes caused the survey team members to lose track of the sampling interval. According to Driver, late arrivals frequently refused to take survey instruments.

Training of Survey Personnel

For eight of the ten study institutions, a core of eight people rotated responsibility of supervising distribution and collection of survey instruments. Each of these people was familiar with the several institutions at which they supervised. Each supervisor was trained by William Driver or Julien Phillips. Training included:

1) written instructions;
2) verbal instructions, and
3) experience in distributing under the supervision of either Driver or Phillips.

At the remaining two institutions (The Cricket Theatre and the Minnesota Institute of Arts) supervision was carried out by each institutions' staff members who received prior extensive verbal and written instructions from Dr. Phillips. In both cases, the same staff members supervised all the surveys.

At the eight institutions noted above, survey teams were drawn from a core of approximately twenty people. These people were Arts Alliance staff (including Driver and Phillips), volunteers, and paid student help. Team members were trained by Phillips or Driver by being given:

1) a brief verbal description of what they would do (completed during an initial interview with the survey team candidate); and
2) written instructions once at the survey site, followed by questions and verbal repetition of any instructions they misunderstood.

Whenever possible, a new survey team member was positioned with an experienced team member during the distribution period. After distribution a supervisor was always available to answer any questions the team members may have had.

At the remaining two institutions, (the Cricket Theatre and the Minneapolis Institute of Arts), the same survey team distributed and collected surveys for each event. At the Cricket Theatre the survey team was composed of ushers. At the Minneapolis Institute of Arts the survey team was composed of volunteers. In both cases, the team members were trained by the supervisors or staffs of the institutions. They were provided with detailed written instructions (prepared by Phillips) as well as verbal instructions from their respective supervisors.

Editing

Dr. Phillips supervised the editing of all audience questionnaires. The two editors were Arts Alliance staff members who had been trained by Phillips using Metro Center protocols. No difficulty was experienced in understanding the protocols, but occasional difficulty in interpretation arose with regards to specific questionnaires. These uncertainties were resolved by phone conversations with Metro Center Staff. Each instrument took two to three minutes to edit. The instruments were keypunched by Thirty-Two Programmers in Towson, Maryland. The keypunch error rate was less than half of one percent (.001 errors per item).

C. The Staff Survey

Distribution and Collection

The staff surveys were distributed by a contact person at each institution either through the organization's payroll procedures, in staff mailboxes, or personally handed out by the institution's director. The specific procedure used by each institution was based on discussions with institution personnel to establish the best method for implementation at each institution.

It was felt that each organization's own management would be the best conduit for the distribution of the surveys. Nine of the institutions

provided the highest level of cooperation. At the Minnesota Orchestra, it was impossible to distribute staff surveys to some personnel (the orchestra members themselves). Due to the delicate nature of the contractural negotiations in process at the time, the orchestra's union representative refused to permit distribution of the survey. Guarantees of confidentiality could not overcome the fear that the orchestra's management would use the survey information to its advantage during the negotiations (or in subsequent negotiations).

Editing

Stamped envelopes addressed to the Twin Cities Metropolitan Arts Alliance were provided with each survey form. The process was organized and monitored by the study coordinator. Dr. Phillips edited all questionnaires, using protocols developed by the Metro Center. The entire process took eight to ten hours (or a little over one minute per questionnaire).

D. The Institutional Data Inventory

William Driver met with all institutions. He was able to complete the inventory jointly with staff at the Chimera Theatre and the Cricket Theatre. Seven other institutions supplied information from individual departments, as coordinated by one person within each institution. This process was necessitated by the size and complexity of the organizations. One organization (the Science Museum) was unable to complete the form in any meaningful fashion due to their recent and continuing rapid growth, including new facilities. The amount of data required the involvement of many people. According to Driver there were many talented, dedicated, and highly competent staff members in each institution who found the study to be a challenge to their abilities.

As a result, many of them entered into the study with a positive approach, which helped immensely in collecting the institutional data. Also, this level of commitment led to individuals going to great lengths to provide the best data available. Relatively few "clean-ups" of this data were required.

E. The Annotation of Expenses

William Driver met with the person in charge of fiscal matters at each institution. In general, the performing arts institutions found the annotation easier because of the relatively small percentage of expenses made for goods and services outside the SMSA. Museums found the annotations much more difficult due to more complicated accounting procedures and more non-local expenditures. The time necessary to complete the annotation ranged from two hours to eight or ten depending on the institution involved. The persons reporting the data were the persons most familiar with accounts payable, who knew in great detail where the money was spent, and who were able to substantiate that detail. In some cases, parts of the data had to be submitted to other departments for verification. In other cases, the data was cross-referenced to an agency or person handling institutional accounts. In any case, when an estimate was provided, the study coordinator asked for further information to substantiate those estimates.

F. The Community Data Inventory

The Metropolitan Council of the Twin Cities Area agreed to provide all necessary community data and documentation of sources. They were unable to provide any data about St. Croix county in Wisconsin. Thus, figures supplied are for only nine counties in the SMSA rather than all ten.

This lack of information creates a minor underestimate of business and tax-effects for the entire SMSA. Tax-related effects were substantiated by a later Metro Center mailing to the Chamber of Commerce, the Minnesota Department of Taxation and Revenues, and the Metropolitan Council.

SECTION III: LOCAL DATA SUMMARY

A. Overview

Sections I and II of this supplement reviewed data collection procedures. (The appendices to this supplement include various study instruments and protocols.) This section presents the data in conjunction with the 30 equation model to derive the effects on local business, government and individuals reviewed in the case study report. Data derived from the audience study and institutional financial/operating data are provided on an institution by institution basis. Employee data is presented in aggregate form only due to confidentiality requirements. Tax-related data and other community data are presented at the level of detail at which they were compiled. Special estimations, if applicable, are discussed in the appropriate sections below. General estimation and weighting techniques are discussed in Section IV.

B. The Audience Data Summary

Exhibit 4 presents the Audience Data Summary. Included for each institution are the total attendance, percentage local attenders, percentage non-local attenders, percentage non-local attenders indicating that their interest in the arts institution was the "sole reason" for their visit, and total spending by local and non-local attenders.

Exhibit 4
Audience Data Summary

	The Children's Theatre	Chimera Theatre	The Cricket Theatre	The Guthrie Theatre	Minneapolis Institute of Arts	Minnesota Dance Theatre	Minnesota Orchestra	St. Paul Chamber Orchestra	Walker Art Center	The Science Museum		Total
Total attendance[1]	137,808	118,614	31,981	420,315	450,000	11,617[3]	464,103[4]	34,970	436,040	660,000		2,765,448
% local attenders	90%	94%	93%	80%	82%	94%	96%	96%	89%	82%		86%
% Non-local attenders	10%	6%	7%	20%	18%	6%	4%	4%	11%	18%		14%
% Non-local (sole-reason) attenders	5.2%	0.53%	2%	10%	4.7%	3.7%	1.6%	1.3%	1.8%	3.7%		4.1%
Number of local attenders	124,027	111,497	29,742	336,252	369,000	10,220	445,539	33,571	388,076	541,200		2,389,824
Number of non-local attenders	13,781	7,117	2,239	84,063	81,000	697	18,564	1,399	47,964	118,800		375,624
Number of non-local attenders (sole-reason)	7,166	629	640	42,032	21,150	430	7,426	455	7,849	24,420		112,197
Per capita spending by:												
Local attenders	$2.13	$2.93	$3.92	$3.90	$2.63	$3.48	$3.99	$2.59	$2.18	$2.96		$3.07
All non-local attenders	--	--	--	--	--	--	--	--	--	--		$56.67
Non-local attenders (sole-reason)	--	--	--	--	--	--	--	--	--	--		$26.45
Total spending by:												
Local attenders[2]	$264,178	$326,686	$116,589	$1,311,383	$ 970,470	$38,002	$1,777,701	$86,949	$ 846,006	$1,601,952		$ 7,339,916
All non-local attenders	$780,959	$403,316	$126,882	$4,763,786	$4,590,208	$39,498	$1,052,008	$79,280	$2,718,083	$6,732,306		$21,286,326[5]
Non-local attenders (sole-reason)[2]	$189,541	$ 16,637	$ 16,928	$1,111,746	$ 559,418	$11,374	$ 196,41[illegible]	$12,035	$ 207,606	$ 645,909		$ 2,967,612

Source: Audience Surveys and Institutional Data Inventories

[1] From Institutional Data Inventory, excludes attendance at in-school performances and attendance at events outside SMSA.

[2] Included in economic impact analysis.

[3] Excludes joint events with Minnesota Orchestra.

[4] Includes joint events with Minnesota Dance Theatre.

[5] Does not sum due to rounding error.

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C. The Institutional Data Summary

Exhibit 5 presents the Institutional Data Summary. Included for each institution are total operating expenditures, total gross wages, taxes, total spending on goods and services, the percentage and amount of spending on goods and services that went to local vendors, the average institutional time and demand deposit, average spending per guest artist day, total number of guest artist days and total guest artist spending, the number of full-time and full-time equivalent employees, real estate taxes paid, self-provided municipal services, and special municipal services provided to the examined institutions. Comments regarding individual data items are provided in the footnotes to the exhibit.

The economic impact analysis presented in the case study and more fully described in this technical supplement included one special estimation. Due to the recent rapid growth of the Science Museum, institutional staff did not deem it meaningful to complete the institutional data inventory or annotate a statement of functional expenses. They did provide total operating costs and total wages. The percentage of local spending for goods and services that was used for the Science Museum was the mean for the other nine institutions in Minneapolis/St. Paul. The number of full-time employees attributed to them for purposes of estimation was calculated using the number of full-time employees per dollar of the total wage bill for the other nine institutions. This procedure undoubtedly understates the number of employees (which was growing rapidly at the time). Estimates of time deposits, demand deposits, guest artist spending, taxes paid, or local government services self-provided by the Science Museum are not included in the totals.

Exhibit 5

Institutional Data Summary

	The Children's Theatre	Chimera Theatre	The Cricket Theatre	The Guthrie Theatre	Minneapolis Institute of Arts	Minnesota Opera Theatre	Minnesota Orchestra	St. Paul Chamber Orchestra	Walker Art Center	The Science Museum		Total
Total operating expenditures[2]	$1,110,250	$472,119	$301,832	$3,578,353[3]	$4,017,263[3]	$447,435	$6,016,007	$1,523,960	$2,354,096	$1,020,674		$21,787,947
Total gross wages	$ 600,394	$407,233	$276,220	$1,869,007	$1,175,110	$305,711	$1,419,991	$ 836,393	$ 785,020	$ 958,410		$10,852,367
Taxes	$ 27,268	$ 10,360	$ 7,575	$ 104,626	$ 31,500	$ 3,825	$ 173,210	$ 3,851	$ 24,140	NA		$ 471,355
Total spending on goods and services	$ 490,596	$248,526	$149,037	$1,471,925	$2,810,649	$257,893	$2,422,816	$ 681,716	$1,544,954	$ 522,110		$10,461,730
$ spent locally on goods and services	97,222	88,611	95,331	97,611	55,331	98,781	66,953	76,911	56,321	70,121		70,121
Local spending on goods and services	$ 391,651	$218,451	$141,137	$1,190,242	$1,555,771	$254,758	$1,622,068	$ 525,618	$ 870,150	$ 364,177		$ 7,317,778
Average time deposit	$ 0	$ 0	$ 4,400	$ 3,097	NA	NA	$ 86,267	$ 3,057	$ 166,940	NA		$ 267,864
Average demand deposit	$ 32,168	$ 10,000	$ 0	$ 25,000	NA	$ 2,000	$ 108,378	$ 3,401	$ 126,709	NA		$ 305,058
Average spending per guest artist day	$ 33	$ 36	$ 27	$ 43	NA	$ 83.33	$ 52	$ 50	$ 43	NA		$ 81
Total number of guest artist days	8	114	516	546	NA	3	350	138	837	NA		2,512
Total spending by guest artists	$ 264	$ 4,104	$ 13,932	$ 23,478	0	$ 250	$ 18,200	$ 6,894	$ 35,991	NA		$ 104,221
Number of full-time employees	63	29	21	225	93	47	155	35	44	64[4]		777
Number of full-time equivalent employees	75	36	21	256	106	49	182	40	46	67		899
Real estate taxes paid by the institution	$ 0	$ 0	$ 329	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	NA		$ 329
Annual cost of institution-provided police and security services	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	NA		$ 0
Annual cost of institution-provided street maintenance	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 205	NA		$ 205
Annual cost of institution-provided lighting (outdoor)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	NA		$ 0
Annual cost of private trash removal	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	NA		$ 0
Assessed value of institutional tax-exempt property	NA[5]	$197,000[6]	$ 14,579[7]	$2,193,900[8]	$3,773,278	NA[9]	$9,155,000[10]	$ 0	$3,715,999	NA		$19,477,004
Special municipal services provided to institution	$ 0	$117,000[11]	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	0		$ 117,000

Source: Institutional Data Inventories, Auditors' Reports

[1] All monetary amounts rounded to nearest dollar.

[2] Excludes capital expenses and depreciation charges.

[3] Does not exclude depreciation. Guthrie does not own building. MIA only says depreciation on building as percentage of plant costs allocated. In neither case is the amount large, nor could it be determined from the financial statements.

[4] Includes admissions, sales and real estate taxes.

[5] Not currently available.

[6] The 1% of building used by theatre.

[7] 95% of assessed value of $15,346 (89=$160,000).

[8] Portion used by the Guthrie.

[9] Moving into new complex in September, 1979.

[10] Orchestra Hall owned by city.

[11] St. Paul-Ramsey Arts Council provides rent utilities maintenance and repairs (both use building).

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D. The Employee Data Summary

Exhibit 6 presents the Employee Data Summary. Included in aggregate form across all examined institutions is information on the number of full-time and full-time equivalent employees, total persons and number of children attending public elementary or secondary schools in employee households, home-ownership and property tax data, and average employee time and demand deposits. Methods and procedures for arriving at these estimates are described in Appendix E of the User Manual of the Baltimore Case Study,[1] and further discussed in Section IV of this supplement.

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[1] David Cwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

Exhibit 6

Employee Data Summary*

Total number of full-time employees	777
Total number of full-time equivalent employees	899
Percentage of full-time equivalent employees living in Minneapolis/St. Paul	84%
Total number of persons in full-time equivalent employee households	1,794
Total number of children attending public elementary or secondary schools from full-time equivalent employee households	179
Percentage of full-time equivalent employees owning home	37%
Average property tax payment by full-time equivalent employee owning home	$1,001
Percentage of full-time equivalent employees renting	63%
Average property tax paid out of rent of full-time equivalent rentors	$ 669
Average time deposit of full-time equivalent employee	$2,424
Average demand deposit of full-time equivalent employee	$ 553

*Across all examined institutions.

E. Tax-Related Data

Inasmuch as the local tax structure directly affects the revenues to local governments that can be attributed to the local arts and cultural institutions examined in this study, this section presents in some detail the relevant tax structure and tax rates for the Minneapolis/St. Paul SMSA. These taxes include property, sales, income, hotel, restaurant, gasoline and transit where applicable. This information was compiled from various sources. Each set of data items includes a footnote reference to the appropiate information source.

1) Property Taxes:

Residential and commercial property tax rates:

County	Avg. Millrate	Assessed value of business real property*
Anoka	99	$ 128,797,000
Carver	111	17,429,000
Dakota	99	193,011,000
Hennepin	111	1,260,319,000
Ramsey	126	523,898,000
Scott	113	41,369,000
Washington	107	86,369,000
wt.avg/total	113	$2,251,174,000

*County values rounded

Source: Metropolitan Council of the Twin Cities Area. Data was not available for Chisago, Wright and St. Croix Counties. The millrates above reflect the different taxing jurisdictions within each area (e.g. school districts, etc.)

Ratio of assessed value to full market value

.43

Source: Victor Ward, Metropolitan Council of the Twin Cities Area.

2) Sales Taxes:

State of Minnesota	-	4%
Minneapolis	-	3%
St. Paul	-	0%

The state sales tax applies to retail sales including admissions, lodging and sales in restaurants. The Minneapolis tax applies only to admissions, lodging, and to sales in restaurants only if live entertainment is present.

Source: Norm Werner, Metropolitan Council of the Twin Cities Area.

Sales taxes collected and retained locally:

	Collected	Retained	% Retained
Edina	$ 6,070,015	$ 1,177,000	19%
St. Louis Park	3,401,528	1,781,000	52%
Golden Valley	2,522,196	959,000	38%
Crystal	1,382,712	971,000	70%
Robbinsdale	1,017,406	763,000	75%
Minneapolis	118,885,811	40,817,819	34%
St. Paul	43,597,271	22,623,159	52%

Sources: Table #3 State Auditor of Minnesota, Revenues, Expenditures and Debts of Cities.

Tables #8 and 9 Commissioner of Revenue Minnesota Sales and Use Bulletin #23.

3) Income Taxes:

State of Minnesota -- graduated (see table below)

If your INCOME is:

at least	but less than	Your TAX is	of the amount over --
$10,000	$11,000	$ 835 + 12.8%	$10,000
11,000	12,000	963 + 12.8%	11,000
12,000	12,500	1,091 + 12.8%	12,000
12,500	13,000	1,155 + 14 %	12,500
13,000	14,000	1,255 + 14 %	13,000
14,000	15,000	1,365 + 14 %	14,000
15,000	16,000	1,505 + 14 %	15,000
16,000	17,000	1,645 + 14 %	16,000
17,000	18,000	1,785 + 14 %	17,000
18,000	19,000	1,925 + 14 %	18,000
19,000	20,000	2,065 + 14 %	19,000

If your INCOME is (cont.):

at least	but less than	Your TAX is	of the amount over --
20,000	27,500	2,205 + 15 %	20,000
27,500	40,000	3,330 + 16 %	27,500
40,000		5,330 + 17 %	40,000

Source: 1978 Minnesota Income Tax forms and instructions supplied by William Driver, Twin Cities Metropolitan Arts Alliance.

Local -- no local income taxes

Source: Victor Ward

4) Hotel Taxes:

State of Minnesota - none
Minneapolis - 3%
St. Paul - 0%

Note: State and local sales taxes are also applied to cost of rooms so that a tourist in Minneapolis pays 10% tax on a hotel-motel room while a tourist in St. Paul pays only 4% tax.

This "stadium tax" was not in effect at time of study. At that time a 2% liquor tax was in effect. Since there is no way to determine an amount spent on liquor, neither of these taxes are included in any effects.

Source: William Driver

5) Restaurant Taxes:

Neither the state nor local jurisdictions levy a special restaurant tax; however, state sales taxes are applied to sales in restaurants. The 3% special sales tax on admissions, amusements and transient lodging does not apply unless live entertainment is present.

Source: William Driver

6) Gasoline Taxes:

State of Minnesota - 9¢ per gallon

Allocation:

State trunk highway fund - 62%
County - 29%
Municipalities - 9%

Thus, 38% is returned to local jurisdictions.

Source: William Driver

7) Transit Taxes:

None reported

Except for data attributed to the Twin Cities Metropolitan Arts Alliance, data was compiled by the Metropolitan Council of the Twin Cities Area.

F. Other Community Data

Other community data required for model estimations include total local business volume, the assessed value of business real property, local time and demand reserve requirements, residential and business property tax rates, the assessed value of residential housing, the number of children enrolled in local public elementary and secondary schools, state aid per pupil, other state revenues allocated to local governments on a per capita basis, local government operating costs (excluding public school and non-locally generated revenues), local public school operating budget (excluding non-locally generated revenues), total local population, assessed value of all non-school local government property and the assessed value of all local school property. These data items are presented below.

1) Total Local Business Volume

Total Retail Sales (1972)	$1,672,434,000
Total Wholesale Sales (1972)	$11,726,006,000
Values added by Manufacturing total (1972)	$2,015,700,000
	$15,414,145,000

Source: Census-Retail Trade, Wholesale Trade, and Manufacturing (1972).

Scaled to 1976 (to match item below) using consumer price index gives a total local business volume of:

$22,015,371,080

2) Assessed Value of Business Real Property

County	Value
Anoka	$ 128,797,000
Carver	17,429,000
Dakota	193,011,000
Hennepin	1,260,319,000
Ramsey	523,898,000
Scott	41,369,000
Washington	86,369,000
total	$2,251,174,000

Source: 1976 Abstract of Real and Personal Property TCUA, Metropolitan Council.

NB: Provided for seven counties, not entire SMSA.

3) Time Deposit Reserve Requirements

3% Normal savings accounts
3% 30-179 Days
2½% 180 days to 4 years
2% for more than 4 years

Source: Victor Ward, Metropolitan Council of the Twin Cities Area.

4) Demand Deposit Reserve Requirements

Are the same for federal and state banks, determined by the size of demand deposits:

Size of Deposits	Reserve Requirement
$0-$2,000,000	7%
$2,000,000-$10,000,000	9½%
$10,000,000-$100,000,000	11 3/4%
$100,000,000-$400,000,000	12 3/4%
$400,000,000-	16 1/4%

Source: Victor Ward.

5) Value of Local Residential Housing

Crystal	$ 227,171,449
Edina	780,311,251
Golden Valley	273,088,651
St. Louis Park	452,855,854
Minneapolis	2,705,347,469
St. Paul	1,283,225,101
Robbinsdale	145,422,337

Source: Victor Ward.

6) Estimated Number of Assessed Residences*

Crystal	8,934
Edina	17,687
Golden Valley	7,520
St. Louis Park	17,586
Minneapolis	168,364
St. Paul	113,295
Robbinsdale	5,632

Source: Victor Ward, "Estimated Completed and Occupied Housing Units 4-1-78," Metropolitan Council.

* Based on total number of completed units.

7) Estimated Number of Local Households*

Crystal	8,825
Edina	17,369
Golden Valley	7,459
St. Louis Park	17,296
Minneapolis	161,710
St. Paul	110,101
Robbinsdale	5,618

Source: Victor Ward, "Estimated Completed and Occupied Housing Units 4-1-78," Metropolitan Council.

* Based on estimated occupied housing units.

8) State per Pupil Educational Grant

$1,095

Source: Victor Ward.

9) Local Government Operating Budget Excluding School Costs and Non-locally Generated revenue

Minneapolis	$178,105,905
Crystal	3,111,787
Golden Valley	3,527,631
Robbinsdale	2,453,292
St. Paul	111,963,177
Edina	7,016,867
St. Louis Park	$7,314,851

Source: Victor Ward, Table 4 State Auditor of Minnesota, Revenues, Expenditures and Debts of Cities 1977.

10) Total Local Population*

Anoka	197,780
Carver	37,060
Dakota	192,870
Hennepin	939,060
Ramsey	466,840
Scott	44,450
Washington	112,610
Chisago	23,100**
Wright	50,000**
St. Croix	N.A.
Total SMSA	2,063,770

* As of April 1, 1978
** Estimated 1977. Federal/State Cooperative Program for Metropolitan Estimates, Series P-26, Washington D.C., U.S. Bureau of the Census, August, 1978.

10) Total Local Population (cont.)

By City:

Crystal	27,840
Edina	48,920
Golden Valley	23,230
St. Louis Park	44,540
Minneapolis	370,210
St. Paul	270,690
Robbinsdale	14,850

Source: Victor Ward, Table A,"Population and household estimates for communities in the Metropolitan area, 1978."

* As of April 1, 1978
** Estimated 1977. Federal/State Cooperative Program for Metropolitan Estimates, Series P-26, Washington D.C., U.S. Bureau of the Census, August, 1978.

11) Local School Budget Excluding Non-locally Generated Revenues and Non-Recurring Charges

Edina	$14,727,036
Golden Valley	2,520,584
Robbinsdale (including Crystal)	34,450,548
St. Louis Park	12,296,855
Minneapolis	101,176,572
St. Paul	70,574,088

Source: Victor Ward, Tables 26 and 27 "State Auditors of Minnesota, Revenues, Expenditures and Debt of the Local Governments," p. 76-77.

12) Total Public Primary and Secondary School Enrollment

St. Paul	33,781
Minneapolis	46,638
Golden Valley	1,239
Crystal-Robbinsdale	21,569
Edina	8,777
St. Louis Park	6,875

Source: Victor Ward, given for fall 1978.

13) Value of All School-Related Governmental Property

Not currently available.

14) Value of All Non-School-Related Governmental Property

Not currently available.

Data compiled by Victor Ward, Metropolitan Council of the Twin Cities Area.

SECTION IV: WEIGHTING AND ESTIMATION TECHNIQUES USED IN THE STUDY

A. Overview

This section orients the reader to the general weighting and estimation procedures used in this study, and orients the reader to the wide range of technical problems involved in economic impact studies. The "User Manual" portion of the Baltimore Case Study* includes an earlier discussion of some of these matters. Methods and procedures described in this final section of the technical supplement should be considered in conjunction with the discussion in the "User Manual."

B. Audience Data

The systematic sampling of individuals in an audience necessitates the weighting of the number of respondents of differing party-sizes due to the differing probabilities of different size parties receiving a questionnaire. This weighting can be effected by multiplying the number of parties of a particular size times the party-size and then dividing by the sampling interval. For a detailed description of this procedure and caveats regarding its use, see the Metro Center working paper on this subject.** This procedure adjusts the number of parties of a particular size, and then uses these new party strata sizes as the basis for computing weighted averages for party expenditures. All estimates of party-spending or portions thereof were estimated in this fashion.

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*David Cwi and Katharine Lyall, Economic Impacts of Arts and Cultural Institutions: A Model for Assessment and a Case Study in Baltimore, Research Division Report #6. New York: Publishing Center for Cultural Resources, 1977.

**D. Alden Smith, "The Systematic Sampling of Parties at Arts and Cultural Events: Weighting Procedures for Party-Specific Items". Working paper. Center for Metropolitan Planning and Research, 1980.

The limited number of visitor cases due either to small sample size or to there being only a small percentage of visitors in the audience on the dates surveyed, necessitated an analysis of visitor mean spending across all sampled institutions rather than on an institutional basis. For this reason, mean visitor spending should be considered with caution. Furthermore, since selected institutions had few out-of-SMSA visitors during the sampling period, estimates of total "sole reason" visitors may be based on a small number of sampled visitors. These institutions are noted in the case study (c.f. Exhibit 7). Results for these institutions should be treated as tentative.

Spending was only attributed to local attenders and non-local sole reason attenders for purposes of estimating economic impact. This spending was calculated by taking the adjusted per party expenditures, converting them into per capita expenditures (on an institutional basis for local attenders, across all institutions for non-local sole reason attenders), and then multiplying these per capitas by the appropriate number of local and non-local sole reason attenders for the season. The total number of attenders for fiscal 1978 was reported by each institution's staff in the institutional data inventories and was later adjusted to exclude attendance at events outside the SMSA, and attendance at events held in schools.

C. Employee Data

The employee survey asked respondents to provide the zipcode of their place of residence. These zipcodes were used to allocate employees into local taxing districts that crossed political boundaries. The distribution of non-respondents place of residence was assumed the same as that of respondents.

The statistics used for calculations utilize institution full-time equivalents which include aggregated part-time employees. The residence of respondent full and part-time employees was used to distribute each institutions full-time equivalents among local political and taxing jurisdictions. Similar procedures were required to weight other sample statistics to full-time equivalents including household size, home ownership, average time and savings deposits, and number of children in public primary and secondary schools. In order to solve one model equation for all institutions and to derive summary data for all employees, sample means were weighted by number of full-time equivalents at each institution. This procedure sought to assure that no one institution was over-represented in the sample.

Estimates of local spending by institutional employees were based on their own salary and wage income and not on total household income. (Each case study cites employee salaries and wages as a per cent of their total household income.) However, costs to local government are based on employee households (unless otherwise noted) since the majority of these effects are only meaningful in terms of households. This section concludes with a discussion of procedures used to estimate direct tax effects.

D. Institutional Data

Institutional data were collected using procedures described in Sections I and II. Total annual operating costs attributed to each institution exclude capital costs and depreciation expense (a non-cash item). Institutional fiscal years were generally not concurrent. The case studies simply identify and aggregate the impact of each institution's last fiscal year.

Basically, these tasks were straightforward accounting tasks requiring substantial fail-safing procedures but litte estimation or weighting. Specific comments or assumptions are detailed in the institutional data summary portion of Section III. In the few cases where governmental agencies or portions thereof could not provide expense statements, then appropiation budgets were used. This procedure excludes institutional spending of earned income from the analysis, and is thus very conservative. Such cases are footnoted in Section III where applicable.

E. Community Tax-related Data

Business Property Taxes

Estimation of property taxes attributable to the examined institutions proved difficult for the following reasons:

(1) selected taxes changed over time,

(2) there were a large number of taxing authorities,

(3) taxing districts were overlapping,

(4) procedures required data that was not always readily available, including market value or taxable value, the assessment ratio and the property tax rate for each jurisdiction for each kind of property under consideration,

(5) differing local procedures by type of local property, e.g. business inventories may or may not be taxable, or taxable at a different rate than business real property,

In general, the procedure followed was to weight the assessment ratio (ar) by the assessed market value (MV) for all taxing jurisdictions and then to weight the property tax rate (pt) by the taxable value (AV). This method must be used if ar differs by jurisdictions (otherwise ar may be weighted by AV). This procedure was used, where possible, to weight up to an aggregate tax rate for all local jurisdictions within a county, then the counties were weighted across the SMSA.

owners and rentors. It should be noted that this procedure assumes that all employees either own a home or rent.

Sales Taxes

The calculation of sales taxes must take account of differing tax rates and taxable transactions by local jurisdictions. One can "tax" the attributable cash flow if one knows the jurisdictions affected and economic sectors involved. The calculation of sales tax effects requires the identification and aggregation of all institution, audience, and guest artist spending subject to sales tax which is then multiplied by the appropiate tax rate. If, for example, the cost of accommodation is not subject to sales tax, then spending in this sector must be excluded. The study uses the coefficient .004375 as the percentage of employee salaries that will result in sales tax revenue per 1% of the local tax rate.*

If only a percentage of locally generated sales tax revenues are returned to local jurisdictions then the local sales tax revenues are equal to that percent times the sales tax dollars generated locally.

Jurisdictions with differing sales tax rates can cause further disaggregation, if so attributable sales taxes were apportioned by the percent sales tax collected in each jurisdiction.

Transit Taxes

Transit taxes, where applicable, were levied in a similar fashion to sales taxes and were treated similarly.

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*Coefficient provided by Dr. David Greytak, of the Maxwell School of Citizenship and Public Affairs, Syracuse University.

Residential Property Taxes

Local residential property tax attributable to institutional employees that own homes, was calculated directly using average property tax reported by the full time employees in the employee survey weighted by the number of full-time equivalent employees at each institution.*

Property taxes due to institutional employees who rent living quarters was estimated in the following manner.** 20% of average rent was assumed to eventually go to landlord property taxes and it was assumed that 25% of rentor employee's household income goes to rent. The following calculations show the amount attributable per rentor employee:

	Mean Renter's Household Income	Rent (monthly)	Property Tax Attributable
Columbus	$14,500	$302	$725
Minneapolis/St. Paul	$13,381	$279	$669
St. Louis	$15,909	$331	$795
Salt Lake	$13,527	$282	$676
San Antonio	$13,636	$284	$682
Springfield	$16,438	$342	$822

The calculation, then, is simply: (Property Tax Attributable) (1-h) (FTE's), where FTE's is the number of full-time equivalent employees. The final calculation involves summing the taxes attributable to

---

*See the section on employee data for other weighting procedures.

**This procedure was suggested by Dr. Katharine Lyall.

Hotel Taxes

The same type of jurisdictional problems encountered with sales taxes are confronted with hotel taxes. To provide a conservative estimate of attributable direct hotel taxes, the following method was used. The estimated number of non-local attenders who came solely to attend an examined institution was multiplied by the average length of their visit to get the estimated number of person-nights in the area. This figure was adjusted by the percent reporting spending on lodging (corrected for party-size) to identify the number of paid person nights in the area. According to Laventhal and Horwath the average daily rate for occupancy in 1977 was $31.62,* or $15.81 per paid person night assuming two persons per room. Multiplying the $15.81 times the number of person nights gives the estimated dollar value of hotel spending by non-local attenders who are in town solely to attend the examined event. This amount of money, when added to the spending on hotels by guest artists at the examined institutions (from the institutional data inventories) gives an estimate of total spending attributable to the hotel sector. This amount was then "taxed" at the appropriate rate(s). This method does not count spending by local attenders on accommodations.

Parking Revenues to Local Governments

Parking revenues to local governments were calculated as follows. Assuming one party per car, the adjusted number of local and non-local sole reason parties was multiplied times the estimated per cent arriving

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*Laventhal and Horwath, "U.S. Lodging Industry, 1978." Philadelphia, Pa. 1978, p. 14.

by car to get the number of attributable cars. This figure was multiplied by the estimated per cent using public parking to get the number of cars using public parking. This number of cars was multiplied by the estimated cost per car (average length of stay in hours times average cost per hour in public lots) to get the parking revenues to local government for each institution. The figures were then summed across all examined institutions.

Gasoline Taxes

Gasoline taxes were estimated by multiplying the average distance traveled times the adjusted number of local and sole reason parties to get total miles traveled. This figure was then divided by an assumed 20 miles per gallon (to be conservative) to estimate attributable gallons used. Then local excise taxes per gallon were applied. No estimate was made of gasoline usage by the examined institution's employees (either business or personal usage) or gasoline usage by guest artists.

Restaurant Taxes

Restaurant taxes, where applicable, were calculated directly from estimated spending in restaurants and bars, using appropriate local tax rates.

Admission Taxes

Admission taxes, where applicable, were taken from the examined institutions' data inventories rather than estimated.

Income Taxes

Income tax estimates frequently involve jurisdictional problems as noted previously with other tax items. One frequent problem is whether the tax is collected where the employee lives, works or both. Income taxes, where applicable, were calculated in the fashion described in the Baltimore Case Study unless otherwise noted in a particular case study.

"Multipliers"

"Multipliers" were calculated in the fashion described in "Multiplier Analysis: Arts and Cultural Institutions."* This method requires estimates of the population of the study area, the ratios of employment to earning in the arts and cultural, retail, and hotel sectors of the economy, and attributable spending in these sectors. Employment to earnings ratios were calculated from 1976 County Business Patterns data, and adjusted for inflation using the consumer price index to provide 1978 estimates. The general analysis report prepared as part of this study includes a detailed discussion of "multiplier effects" and their place in regional economic impact analysis.

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*David Greytak and Dixie Snively, "Multiplier Analysis: Arts and Cultural Institutions," unpublished paper. The Johns Hopkins University Center for Metropolitan Planning and Research, April 1979.

TECHNICAL SUPPLEMENT TO
THE ECONOMIC IMPACT
OF TEN CULTURAL INSTITUTIONS ON THE
ECONOMY OF THE MINNEAPOLIS-ST. PAUL SMSA
VOLUME II -- APPENDICES

The Johns Hopkins University
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TABLE OF CONTENTS

Page

APPENDICES

A) Audience Survey Dates and Response Rates 1
B) Annotation Instructions 12
C) Institutional Data Inventory 16
D) Community Data Inventory 38
E) Sample Calendar Instructions 51
F) Documentation Protocol 55

APPENDIX A

Audience Survey Dates and Response Rates

THE CHILDREN'S THEATRE

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/21	89	38	0	38	1/5	726
1/07	144	110	0	110	1/3	738
1/27	100	68	0	68	1/3	730
2/02	118	81	0	81	1/3	692
2/03	87	61	0	61	1/3	746
2/17	69	48	0	48	1/3	750
2/18	75	56	1	55	1/3	746
n	682	462	1	461*	---	5128

* The overall response rate across the survey period was 68%.

CHIMERA THEATRE

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/29	62	50	0	50	1/4	291
1/07	96	82	1	81	1/3	438
1/14	127	96	0	96	1/3	558
1/20	123	107	1	106	1/3	560
2/09	92	78	0	78	1/3	477
2/17	160	108	0	108	1/3	565
2/22	62	55	0	55	1/3	250
2/25	87	65	1	64	1/3	434
n	809	641	3	638 *	---	3573

* The overall response rate across the survey period was 79%.

THE CRICKET THEATRE

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/10	30	24	0	24	1/4	149
12/30	22	19	0	19	1/4	100
1/05	39	31	0	31	1/2	110
1/06	46	39	0	39	1/2	114
1/13 1	44	30	0	30	1/2	106
1/13 2	46	33	0	33	1/2	99
1/14	59	42	0	42	1/2	157
1/19	52	46	0	46	1/2	134
2/03 1	26	22	0	22	1/2	75
2/03 2	44	35	0	35	1/2	95
2/08	41	37	0	37	1/3	150
2/09	66	32	0	32	1/3	238
2/10	49	28	0	28	1/3	166
2/11	35	31	0	31	1/3	139
2/15	30	19	0	19	1/3	134
2/17 1	55	22	0	22	1/3	199
2/17 2	50	35	0	35	1/3	169
2/18	51	32	0	32	1/3	186
2/22	27	17	1	16	1/3	98
2/23	50	24	0	24	1/3	236
2/24 1	40	28	0	28	1/3	164
2/24 2	34	22	0	22	1/3	211
n	936	648	1	647 *	---	3229

* The overall response rate across the survey period was 69%. One questionnaire was deleted in subsequent computer edits.

THE GUTHRIE THEATRE

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/20	199	110	0	110	1/5	1437
1/02	184	142	0	142	1/3	595
1/17	245	157	0	157	1/3	1345
1/20	230	163	0	163	1/4	1434
2/09	265	153	0	153	1/3	1069
2/10	248	176	1	175	1/4	1327
n	1371	901	1	900 *	----	7207

* The overall response rate across the survey period was 66%. Eight questionnaires were deleted in subsequent computer edits.

MINNEAPOLIS INSTITUTE OF ARTS

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance*
12/30	44	31	0	31	1/5	1023
1/05	66	38	0	38	1/3	595
1/09	53	30	0	30	1/2	586
1/25	12	11	0	11	1/3	700
2/01	49	25	0	25	1/3	996
2/15	5	5	0	5	1/3	679
2/18	200	93	0	93	1/3	2469
2/24	131	39	0	39	1/3	2655
2/25	347	157	0	157	1/3	3005
n	907	429	0	429	---	12,708

* The attendance figures given here are for the entire day, not the hours that sampling occurred. The overall response rate across the survey period was 47%. Two questionnaires were deleted in subsequent computer edits.

MINNESOTA DANCE THEATRE

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/14	378	237	2	235	1/5	3500
12/16	376	213	0	213	1/4	4297
n	754	450	2	448 *	---	7797

* The overall response rate across the survey period was 60%. The two questionnaires rejected during editing were apparently not deleted from the sample.

MINNESOTA ORCHESTRA

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
1/03	288	206	0	206	1/5	2599
1/10	220	126	0	126	1/3	1526
1/26	324	198	0	198	1/4	2509
2/08	346	262	0	262	1/3	1556
2/16	358	238	1	237	1/4	2693
n	1536	1030	1	1029 *	---	10,883

* The overall response rate across the survey period was 67%. Sixteen questionnaires were deleted in subsequent computer edits.

ST. PAUL CHAMBER ORCHESTRA

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
12/01	290	121	0	121	1/5	800
1/13	408	304	0	304	1/3	1781
1/18	131	116	0	116	1/3	649
1/19	165	146	0	146	1/3	777
2/10	322	248	1	247	1/3	1395
n	1316	935	1	934 *	---	5402

* The overall response rate across the survey period was 71%. Three questionnaires were deleted in subsequent computer edits.

WALKER ART CENTER

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
1/04	55	44	0	44	1/3	1437
1/07	400	261	0	261	1/3	3072
1/11	23	16	0	23	1/2	779
1/30	40	23	0	23	1/3	773
2/02	38	26	0	26	1/3	680
2/11	202	145	0	145	1/3	1273
2/21	51	14	1	13	1/3	1547
n	809	529	1	528 *	---	9561

* The overall response rate across the sruvey period was 65%. Four questionnaires were deleted in subsequent computer edits.

THE SCIENCE MUSEUM OF MINNESOTA

Date	Distributed Forms	Returned Forms	Rejects During Editing	Valid Forms	Sampling Intervals	Total Attendance
2/14	70	61	0	61	1/5	570
2/15	36	32	0	32	1/5	316
2/17	412	384	0	384	1/4	2854
2/23	150	115	0	115	1/4	906
2/25	383	243	2	241	1/4	1704
n	1051	835	2	833 *	---	6350

* The overall response rate across the survey period was 79%. Five questionnaires were deleted in subsequent computer edits.

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APPENDIX B

Annotation Instructions

THE JOHNS HOPKINS UNIVERSITY

CENTER FOR METROPOLITAN PLANNING AND RESEARCH

BALTIMORE, MARYLAND 21218

Instructions for Annotating Budget Statements and Statements of Functional Expenses

1) The study coordinator must collect the auditor's report, the last income and expenditure budget summary for the fiscal year included in the auditor's report, and any questionnaires completed for service organizations (ASOL, TCG, Opera America, etc.) The budget summary is an independent internal document reflecting the institution's proposed budget. It is often prepared for the Board. Collect the last budget prepared in the fiscal year for which you have an auditor's report. (Ideally, you will collect a final quarter budget containing actual expenses for the first three quarters and a budget for the last.) These budget statements are probably more detailed than the auditor's report.

2) The study coordinator should make (and keep) a copy of all documents and forward a copy to David Cwi.

3) The study coordinator should identify the person most familiar with accounts payable, e.g., the bookkeeper or controller. Prior to contacting this person, the study coordinator will contact David Cwi to review the adequacy of each institution's "statement of functional expenses" and budget statement. If portions of the "statement of functional expenses" are not adequate, the study coordinator may have to rely on the budget statement. If neither is sufficiently detailed, it will be necessary to sample invoices as noted below.

4) The study coordinator will meet with the person noted in #3 in order to identify institutional expenditures with local firms. Line items depicting staff salaries may be ignored inasmuch as the percentage of staff that reside locally and the amount staff spend locally will be identified by the staff survey. Contractural labor services, e.g., guest artists, should be identified as local or non-local using the procedure described below. (The amount non-local "guests artists" spend while they are in your SMSA is identified using the attached instrument. Treat all expenditures made with non-local "guest artists" as spent completely out of the SMSA.)

SHRIVER HALL, HOMEWOOD CAMPUS – TEL. AC 301 - 338-7174

Procedure for Annotating Statements of Functional Expenses/Auditor's Report

After you have forwarded to the Metro Center the documents cited in #1 above, they will be examined to verify the appropriateness of the annotation strategy discussed below. Potential problems will be reviewed by phone before the study coordinator meets with institutional staff.

The notation described below seeks to identify total institutional expenditures with firms located in the examined SMSA. We are concerned with whether goods or services were purchased from a local source, even if the source was part of an enterprise with headquarters in another city. In short, expenditures are local if they are made locally, even if the firm is not locally owned and operated.

It is anticipated that the study coordinator and the person in charge of accounts payable will review each line of the statement of functional expenses. To help confirm the judgement of institutional staff regarding the proportion of each item that is spent locally, it would be helpful to ask staff to identify the local vendors from whom the goods and services in question were purchased. If there appears to be some doubt as to the accuracy of staff representation of local spending, in one or another categories, you will indicate this by "?" next to the line in question as described below.

a) next to each line item should be placed the % of that expense spent within the SMSA

b) if a majority of the remainder is spent out of the state, a check (✓) should be placed next to the % spent in the SMSA.

c) if a majority of the remainder is spent in the state, no check mark is needed.

d) When there is doubt about the remainder, write "?" next to the % spent in the SMSA.

e) If there is doubt about the % spent locally, write "?" next to the appropriate line item.

f) In special cases -- Twin Cities and St. Louis -- where two states are overlapped by the SMSA, "out-of-state" means out of both states and "in-state" means in either or both states.

Sample Annotation for Auditor's Reports

or Budget Summary

			% in SMSA
1)	Legal and accounting	5,146	100%
2)	Maintenance supplies	18,000	60%
3)	Miscellaneous	461	90% ✓
4)	Office supplies	3,290	80%

✓ on line 3 implies that the majority of the remaining 10% was spent both out of the SMSA and out of state.

The lack of checks on lines 2 and 4 implies that the majority of the 40% and 20% respectively spent out of the SMSA were spent in the state.

If the person in charge of accounts payable is not sure what % of <u>any</u> line item (especially large categories) is spent within the SMSA, then the invoices for that item must be sampled. If the statement of functional expenses is not sufficiently detailed and you are not allowed access to the supporting budget summary, you will have to sample invoices. In order to deal with this issue at the outset, please send both budget and auditor's reports <u>before</u> you visit the institution.

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APPENDIX C

Institutional Data Inventory

THE JOHNS HOPKINS UNIVERSITY

CENTER FOR METROPOLITAN PLANNING AND RESEARCH

BALTIMORE, MARYLAND 21218

E.I.S. Data Inventory

The current six city study involves many different types of institutions. This form will be used to supplement information gathered from institutional auditor's reports and budget statements. Many of the items of information requested are inapplicable to one or another type of institution. Please answer all items that apply, noting when the answer is an estimate.

Instructions

Please do not leave any lines blank:

if you mean zero, write "0"

if you mean not applicable, write "N/A"; (if entire sections are not applicable, please so indicate)

if you mean an estimate, write "E" after the answer.

Much of the information requested may be available from reports or applications prepared by th in-stitution for their service organization or various funding sources. To minimize the burden o the participating institutions, study coordinators should collect such material from institutional managers and use it to complete as much of this form as is possible. We suggest that Section II be completed at the same time the study coordinator visits the institution to annotate the statement of functional expenses. All data provided should be for the last fiscal year, which should be noted below.

Section I

Data Inventory
Institutional Operating Characteristics

Date: _____

Fiscal Year you are reporting: _____

Name of Organization: _____

Name and title of managing director: _____

Mailing Address: _____

Telephone Number: _____

Name of staff person most familiar with financial information/internal accounts: _____

Mailing Address: _____

Telephone Number: _____

SMSA Number: _____

Institution Number: _____

Audit basis:
cash _____
accrual _____
hybrid _____

Fiscal Year begins: _____

IRS non-profit?:
Yes _____ No _____

Year organization founded: _____

How many years in present facility: _____

In what year was present facility built: _____

PERFORMING ARTS ACTIVITIES

	Regular Season	Touring	Special Events**	In-School or other Programs**	Total
1. Total Paid Attendance					
2. Total Complementary or Free					
3. Total Attendance					
4. Total Attendance by Subscribers					
5. Total Attendance Group Sales					
6. Total Discounted Single Tickets					
7. Total Undiscounted Single Tickets					
8. Total Possible Attendance *					
9. % Capacity paid (1 ÷ 8)					
10. Total # of Productions					
11. Total # of Performances					

* Total possible attendance should reflect the fact that different halls may be used and that orchestra pit seating may be used for some performances.

** Please briefly describe these events and programs, e.g., "benefit concert local charity."

Special Events: _____

_____

_____

_____

In-school or other Programs: _____

_____

_____

_____

EXHIBITIONS, LECTURES, WORKSHOPS, OTHER ACTIVITIES

NUMBER OF ACTIVITIES AND ATTENDANCE: MAIN FACILITY

	Total #	Total Attendance	Total Paid
Main Facility			
Total Days Open to the Public per year	_____		
Total Hours Open to the Public per year	_____		
Total Attendance	_____		
Total Paid	_____		
Total # of Permanent Exhibitions (excluding touring)	_____	_____	_____
-- on average, how many minutes do people spend viewing each exhibition?	_____	XXXXXXXXXX	XXXXXXXXX
Total # of New/Special Exhibitions (excluding touring)	_____	_____	_____
-- on average, how many minutes do people spend viewing each exhibition?	_____	XXXXXXXXXX	XXXXXXXXX
-- total # developed by the institution	_____	XXXXXXXXXX	XXXXXXXXX
-- total # developed by others*	_____	XXXXXXXXXX	XXXXXXXXX

* merely being shown, but not developed by in-house curatorial staff

(continued on next page)

EXHIBITIONS, LECTURES, WORKSHOPS, OTHER ACTIVITIES

NUMBER OF ACTIVITIES AND ATTENDANCE: MAIN FACILITY (cont'd)

Main Facility	Total #	Total Attendance	Total Paid
Total # of lectures			
Total # of workshops			
-- on average, how many hours do people spend in each workshop?		XXXXXXX	XXXXXX
Total # of classes			
-- on average, how many hours do people spend in each class		XXXXXXX	XXXXXX
Total # of films			
Total # of other (please list):			
--			
--			
--			

Touring Activities -- see next page

EXHIBITIONS, LECTURES, WORKSHOPS, OTHER ACTIVITIES

NUMBER OF ACTIVITIES AND ATTENDANCE: TOURING/OUTREACH

Touring

	Total #	Total Attendance	Total Paid
Total # of Touring Exhibitions			
-- on average, how many minutes do people spend viewing each exhibition?		XXXXXXXXX	XXXXX
Total Days Available to the Public per year		XXXXXXXXX	XXXXX
Total Hours Available to the Public per year		XXXXXXXXX	XXXXX
Total # of Lectures*			
Total # of Workshops*			
-- on average, how many hours do people spend in each workshop		XXXXXXXXX	XXXXX
Total # of Classes*			
-- on average, how many hours do people spend in each class		XXXXXXXXX	XXXXX
Total # of Films*			
Total # of Other (please list):			
--			
--			
--			

* Refers to outreach activities conducted outside the main facility.

Instructions

Contributions from individuals and businessmen may be received by the institution in either or both of two ways: as a cash contribution or a purchased membership treated by the institution as a contribution.

The information provided below allows institutions to distinguish between both sorts of cash contributions. Information is first sought on cash contributions that are not received as purchased memberships. Information is then requested on membership income.

"Individuals" refers to contributions from individuals taken by them as a tax exemption. "Businesses" refers to contributions taken as a tax deduction by a business. You are asked to identify the total number of contributions and then group them by size of contribution.

CONTRIBUTION PATTERNS

Cash Contribution (not including memberships)

Total number of individuals contributing _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000 and over

Total number of business contributions _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000-2499
____2500-4999 ____5000 and over

Memberships

Total number of individual memberships _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000 and over

Total number of family memberships _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000 and over

Total number of business memberships _____

Total # grouped by size of contribution ____$0-49 ____50-99 ____100-499 ____500-999 ____1000-2499
____2500-4999 ____5000 and over

CONTRIBUTION PATTERNS

(cont'd)

Please list all government agencies and levels of government, e.g. State Arts Council, from which you have received grants and specify the amount.

Granting Agency	Amount

Please list all private foundations from which you have received grants and specify the amount.

Foundation	Amount

Instructions: Categories I through III should be used for persons regularly working for the institution. Included are salaried and hourly staff -- i.e., persons for whom a W-2 form is prepared -- and volunteer and CETA staff. (see note below regarding volunteers). Also include all staff positions for whom a contract instrument is used. This will include staff-paid on a per service basis, e.g., ushers and musicians, but not specialized consultant services, e.g., auditor. Do not include guest artists or staff/cast of booked-in shows. Do not include personnel turnover in I - III, i.e., the total # of persons who have worked in the institution, but rather the number of staff positions these persons have filled. If the number of positions varies by time of year or by event, e.g., some shows require more dancers, please estimate average number of positions at any point in time during the fiscal year for which information is being supplied. Cite total number of positions in each category and total hours worked per year, including overtime, whether paid or not.

ORGANIZATIONAL STAFFING

	PAID FULL-TIME		PAID PART-TIME		CETA		FULL AND PART-TIME VOLUNTEER *	
I. ADMINISTRATIVE	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year
Executive Director/General Manager/ Business Manager								
House Manager/Box Office Manager/ Dept. heads								
Development/PR/Fundraising								
Clerical/Secretarial								
Maintenance/Grounds/Restaurant-Bar/ Gift Shop/Shipping								
SUB-TOTAL								

* Note: Volunteer includes Guilds, Boards, and all other unpaid labor involved in running the organization.

(continued on next page)

ORGANIZATIONAL STAFFING
(cont'd)

II. ARTISTIC PROGRAM/PRODUCTION

	PAID FULL-TIME		PAID PART-TIME		CETA		FULL AND PART-TIME VOLUNTEER*	
	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year	# of positions	hrs worked per year
Non-performing: technical/managerial (set, lighting, costume, wardrobe, design, props, casting, stage manager, artistic director, etc.)								
Performing: musicians, actors, chorus, dancers, conductors								
Stagehands/ushers/box-office assistants/ guards/security/guides								
SUB-TOTAL								

III. EDUCATION/RESEARCH/OUTREACH

Librarian/Editor/Photographer/Designer								
Instructor/Researcher/Curator/Conservator								
SUB-TOTAL								
TOTAL								

* Note: Volunteer includes Guilds, Boards, and all other unpaid labor involved in running the organization.

WAGE STRUCTURE

Instructions: Please estimate average wage rates using per year for full-time and per hour for part-time. Please estimate wage rates per position not per person. (See instruction from previous data section.)

Staff Categories	Paid Full-Time average income per year all positions	Paid Part-Time average income per hour all positions
I. Administrative		
Executive Director/General Manager/ Business Manager	_____	_____
House Manager/Box Office Manager/ Dept. Heads	_____	_____
Development/PR/Fundraising	_____	_____
Clerical/Secretarial	_____	_____
Maintenance/Grounds/Restaurant-Bar/ Gift Shop/Shipping	_____	_____

(continued on next page)

WAGE STRUCTURE (cont'd)

Staff Categories	Paid Full-Time average income per year all positions	Paid Part-Time average income per hour all positions
II. ARTISTIC PROGRAM/PRODUCTION		
Non-performing: technical/managerial (set, lighting, costume, wardrobe, design, props, casting, stage manager, artistic director, etc.)	_____	_____
Performing: musicians, actors, chorus, dancers, conductors	_____	_____
Stagehands/ushers/box-office assistants/ guards/security/guides	_____	_____
III. EDUCATION/RESEARCH/OUTREACH		
Librarian/Editor/Photographer/Designer	_____	_____
Instructor/Researcher/Curator/Conservator	_____	_____

Section II

Model Specific Data From Institutional Records

Average daily balance in <u>all</u> institution time (savings) accounts _____

Average daily balance in <u>all</u> institution demand (checking) accounts _____

<u>Note</u>: Both of the above figures may be calculated by choosing 3 days in each month randomly using the table below. This results in 36 balances which must be summed and divided by 36. If there is more than one checking or savings account, then the process must be repeated for each account (e.g., if two checking accounts, one would use the above procedure to create two averages, then simply add them and write the resulting number in the second blank).

RANDOM NUMBER TABLE

month in fiscal year

selected days	1	2	3	4	5	6	7	8	9	10	11	12
	22	24	16	13	19	2	7	12	25	28	31	1
	11	6	4	28	14	8	23	30	22	1	11	30
	10	29	5	15	3	18	21	20	15	9	17	26

Using the table: For month 1, the three days to sample are the 22nd, the 11th, and the 10th. The account statement may read as follows:

Date	Transaction	Balance
1/5	check	$20
1/10	deposit	$30
1/11	check	$10
1/23	check	$ 5

Using the random table, one finds that the balance for the 22nd is $10, because no transaction occurred between the 11th and the 23rd and the balance on the 11th was $10. The balance for the 11th and 10th can be read directly from the above statement.

Total local real estate taxes paid directly by the institution.* _____

Total payments to local government made in lieu of taxes. _____

Total admissions tax collected. Please (√) level of government. Amount

____ local tax _____

____ state tax _____

Total sales tax collected. Please (√) level of government. Amount

____ local tax _____

____ state tax _____

Other taxes collected and fees paid by the institution to government. Please list type, level of government and amount. Exclude payroll taxes and federal, state, or local income tax deductions from staff payrolls.

Tax or Fee	Level of Government	Amount
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

*Since most artistic and cultural institutions are non-profit, tax-exempt institutions, they will pay no real estate taxes. Some may own property which is not used for non-profit purposes, in which case they will pay property tax.

Please estimate total annual cost of municipal-type services provided by the institution:

1. Street lighting (include parking lots) _____
2. Landscaping _____
3. Street maintenance _____
4. Sidewalk maintenance _____
5. Trash removal (not including janitorial or maintenance costs) _____
6. Security and police (not including the cost of central station alarm services _____
7. Other (please list)

_____

_____

_____

Please list and describe any special municipal services provided to your institution for which the city or county does not require reimbursement (e.g., 5 policemen for two hours per week, etc.)

1.

2.

3.

4.

Please estimate the number of guest artists employed by the institution during the fiscal year under consideration. _____

Note: "guest artist" refers to any non-resident brought to the institution to direct, to give performances, exhibitions, lectures, etc. (e.g., a booked-in concert by a major symphony might involve 100+ guest artists). For our purposes, guest artists are non-residents in the community for a relatively short period of time. They may or may not be persons for whom the institution completes a W-2.

When guest artists are in your community, how many days on average do they stay? _____

Note: The average should take into account guest artists that may stay for as long as a month (e.g., an actor brought in to do a play) as well as guest artists brought in for only one day.

On average, how much will a guest artist spend per day, excluding the cost of accommodations? You may use per diem rates that are part of contractural agreements or simply your best estimate of likely daily expenditures on food, incidentals and entertainment. _____

When guest artists are in your community, how many nights, on average, do they stay? _____

Where do guest artists at your institution stay while in your community? And what does it cost them to stay there? Please indicate the number utilizing the choices given and the cost to the guest artist per night.

	# guest artists using	cost to each per night
Apartment owned by institution	_____	_____
Hotel or motel (please name)	_____	_____
--	_____	_____
--	_____	_____
--	_____	_____
Other (please list)		
--	_____	_____
--	_____	_____

What percentage of the institution's total annual paid ticket sales/admissions are sold through the following outlets:

1. Box/ticket office on premises _____
2. Group/block sales _____
3. Commercial ticket agencies _____
4. Ticketron outlets _____
5. Other sales in retail stores _____
6. Co-operative ticket booths (e.g., arts alliance sets up booth with aid of local bank to sell tickets for all member organizations) _____
7. Other (please specify)
   -- _____
   -- _____
   -- _____

Does the institution participate in any subscription series or offer memberships and services in conjunction with any other arts organizations. (e.g., a performing arts series that includes 2 plays, 2 dance recitals, etc.)

Yes _____ No _____

If Yes, please describe:

TO BE COMPLETED BY THE STUDY COORDINATOR ONLY

Please estimate the number of the following types of businesses within convenient walking distance of the institution that are open when the institution has performances or is open to the public.

	none	one or two	a few	many
Restaurants	____	_____	____	____
Bars	____	_____	____	____
Diners/fast food outlets	____	_____	____	____
Galleries and specialty shops	____	_____	____	____
Other retail establishments	____	_____	____	____

Were any of these businesses built solely or primarily to serve the examined cultural institution?

_____Yes _____No

If Yes, please indicate which and describe: _____

_____

Are there parking facilities near the examined institution that are operated by local government or local public agencies?

_____Yes _____No

Do parking revenues go directly to local government as general revenues, or are they used solely to pay costs incurred by the parking facility?

____general revenues ____the parking facility only ____both

TO BE COMPLETED BY THE STUDY COORDINATOR ONLY (cont'd)

Are there privately run parking facilities near the examined institution? (including facilities owned and operated by the institution.)

_____Yes _____No

Were any of these parking facilities built solely or primarily to serve the examined cultural institution?

private lots _____Yes _____No

public lots _____Yes _____No

Is there a local or state tax in addition to the parking fee?

_____ Yes _____ No

If Yes, how is the tax computed?

Local _____ State _____

_____ _____

_____ _____

What percentage of people utilizing the institution arrive by car? _____%

35

TO BE COMPLETED BY THE STUDY COORDINATOR ONLY (cont'd)

	Private Lots	Public Lots
What percentage of parties arriving by car are likely to use these parking facilities?	_____	_____
Approximately how long will the average audience/ visitor party park his car?	_____	_____
Approximately how much will they spend to park their car?	_____	_____

What percentage of parties arriving by car will use metered spaces? _____%

Approximately how much will they spend to park their car? _____

What is the assessed value of the institution's facility?

Property owned by the institution _____

Facilities rented by the institution _____

% of facility occupied by the institution _____

Note: If not available from the institution, these figures may be available from the local tax and assessment department.

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APPENDIX D

Community Data Inventory

THE JOHNS HOPKINS UNIVERSITY
CENTER FOR METROPOLITAN PLANNING AND RESEARCH
BALTIMORE, MARYLAND 21218

TO: Study Coordinators

FROM: David Cwi

DATE: March 1, 1979

Attached is an expanded version of the annotated community data inventory distributed at the October Study Coordinator's Workshop. The revised draft has been developed after a review of the community data forwarded to date. We hope that it provides an adequate basis for data collection despite the differences that have appeared among partnership cities regarding such matters as type and number of taxing jurisdictions, state/local fiscal relations and the availability of particular data items.

After you have reviewed the attached, please contact me by phone. We will want to discuss problems and progress to date and identify if there are ways that we can assist you in gathering needed data or deriving estimates.

In the short run, your first priority is the implementation of the staff survey and the collection of budget statements and auditor's reports for our review. We would like to complete all data collection tasks by the end of March and look forward to promptly returning your audience studies as soon as keypunching is completed.

SHRIVER HALL, HOMEWOOD CAMPUS – TEL. AC 301 - 338-7174

THE JOHNS HOPKINS UNIVERSITY

CENTER FOR METROPOLITAN PLANNING AND RESEARCH

BALTIMORE, MARYLAND 21218

Community Data Series Reporting Protocol

Attached is a revised draft of the community data inventory distributed during the October Study Coordinator's Workshop. Each of the data items is reviewed and an attempt made to anticipate difficulties in collecting data.

The data required will be found in selected state, local and federal reports. The attached includes suggestions regarding appropriate state and local agencies to be contacted.

While many of the data items deal with the SMSA as a whole, it will be necessary in many cases to provide information on individual taxing districts within the SMSA. Even when the data item deals with the SMSA as a whole, you may find that the data has not been aggregated by an appropriate regional or state agency; in which case you will have to assemble SMSA data from reports prepared by appropriate local agencies within the several jurisdictions that comprise the SMSA.

We will be relying on you to document the community data series. Ideally, you could xerox relevant pages from reports cited, recording also the title of the report, the issuing agency, the fiscal year covered, and the date of publication -- in short, a standard footnote reference. You should also maintain a file of correspondence with agencies supplying information. Be assured that you need not forward copies of documentation to Johns Hopkins. (We will give full credit to you for the information you supply, so you should make sure that you have documented the data should persons raise questions concerning findings.)

After you have reviewed the attached inventory, it will become apparent that no form can be devised to take account of the idiosyncrasies of participating cities. Since the notion of a standardized form seems inappropriate, we think it best that you simply report data items in the same order as they are listed on the annotated inventory. We would also appreciate if you would cite the title of the report from which you took the information, the agency issuing the report, the page in the report, and the fiscal year covered. In short, please provide data values in the same order as the attached inventory, and include a footnote reference for our records.

SHRIVER HALL, HOMEWOOD CAMPUS – TEL. AC 301 - 338-7174

When you must construct data for the SMSA as a whole by adding together local data, please cite all local agency reports and data values used. Similarly, when data on individual jurisdictions is called for, please cite each data values and reports used.

After reviewing the attached, it will be apparent that some local impacts, especially tax revenues generated, may require inventiveness on your part and the advice of local or state agency staff. For example, data on tax revenues retained or generated locally may be impossible to determine in cases when the tax is a state tax, and revenues are not returned to the locality on a formula basis. When revenues are collected in the SMSA by the state, mixed with funds from other local jurisdictions and returned through various state-local intergovernmental transfers, it may be difficult to determine locally retained revenues attributable to the examined institutions. It may be necessary to consult local experts on your state's tax policies should per capita or other formulas for state aid and/or the return of particular tax revenues not exist.

Finally, there may be special local taxes of interest which are not dealt with in our model, and which may be applied by all or only some local jurisdictions. As a first step, you would do well to simply identify the major state and local tax sources by examining the Budget reports of your city and county localities or by contacting knowledgeable persons in your regional planning agency. Similary, you would do well to request reports from the State Treasurer's Office that detail state/local fiscal relations. This discussion may help to make clear why we recommended at the outset that you involve knowledgeable local planners in this project.

ANNOTATED COMMUNITY DATA INVENTORY

The following inventory of community data is a revised version of the draft reviewed during the October Study Coordinator's Workshop. The inventory lists the data item, its notation, model equation in which it appears, page reference in the user manual and suggested sources of information.

Data Items

1. Total Local Business Volume (total local retail sales + total local wholesale sales + value added to raw materials by local manufacturers): TBV, B-4.1, p. 43.

   Source: Local planning or economic development department; Bureau of Census publications - Retail Trade Area Statistics, Wholesale Trade Area Statistics, and Census of Manufacturers.

   Comment: Identify TBV for the SMSA as a whole, except if sales tax rates vary within the SMSA (see #14). A regional planning or economic development department may have aggregated this information for the several units of government within the SMSA, otherwise the information must be gathered for each local unit in the SMSA and aggregated. Census or community data may be old (e.g. 1967) in which case the figure for TBV must be increased to reflect current values. TBV can be updated by assuming an increase equal to the increase in sales tax receipts during the period in question, adjusting for changes in the tax rate. If it is necessary to adjust TBV, contact Doug Smith.

2. Total assessed valuation of business real property: AV, B-4.1, p. 43.

   Source: Local tax office.

   Comment: Because the SMSA may consist of several taxing jurisdictions, this may complicate your efforts to identify AV. There are two complications. AV may be comprised of separate valuations for business (a) buildings, (b) equipment, and (c) inventory. If differing assessment ratios (ar) are used for (a), (b), or (c) by all or some of the SMSA's taxing jurisdictions, then the assessed valuation for (a), (b), and (c) must be listed separately for each taxing authority in the SMSA. Otherwise, we cannot utilize equation B-4.1 which divides AV by the appropriate ar. See #3 and #13 below.

3. The ratio of assessed valuation to full market value of business property: ar, B-4.1, p. 43.

   Source: Local tax office.

   Comment: "ar" refers to the percentage of full market value used in determining the assessed valuation of business property. It is conceivable that "ar" might vary by jurisdiction or by type of property, prompting the need for separate AV values for each type of property in each local jurisdiction (c.f. #2 above). When assessed valuation is 100% of full market value, ar is 1. Should "ar" values vary by type of business property or by jurisdiction, then a list should be prepared citing all local jurisdictions that tax business property, the type of property tax, and AV and ar values for each type. This will allow a weighted SMSA value for AV and ar. In addition, see #13 below. You may need, in assembling AV and ar values to also cite business property tax rates by jurisdiction and type of property.

4. Local inventory-to-business volume ratio: ir, B-4.2, p. 45.

   Source: Local planning, tax assessment, or economic development agency; or use a national ratio derived from an IRS (Internal Revenue Service) publication, Statistics of Income.

   Comment: The local area is the SMSA as a whole. This item is calculated as the ratio of the value of end-of-year inventory to gross sales; it is thus the value of inventory as a percentage of gross business receipts. (Cite the national figure used in the Baltimore Study if local data is not available.)

5. Local time deposit reserve requirement: t, B-5, p. 46.

   Source: State banking regulatory agency; a local savings institution official.

   Comment: When subtracted from 1, the item indicates the percentage of deposits in time (savings) accounts that may be used by financial institutions for loans. The value to be used is for the SMSA as a whole. A complication is introduced because commercial banks and state chartered banks and savings and loans may have differing reserve requirements inasmuch as they are regulated by differing federal or state agencies. This will require that t be weighted to reflect the volume of savings with particular types of local savings institutions. Polk Profile of Change may be available at a local bank research department or data may be collected by the appropriate state regulatory agency listing total time deposits (savings) in Banks, Savings and Loans and Credit Unions. The calculation of t should be weighted to reflect the percentage of savings dollars held by federal and state chartered banks, savings and loans and credit unions and the differing state and federal reserve requirements. Contact Doug Smith for details.

6. Local Demand deposit reserve requirement (checking institution regulation): d, B-5, p. 46.

   Source: State banking regulatory agency; a local checking institution official.

   Comment: Same as number 5 above for deposits in checking accounts. Inasmuch as savings and loans and credit unions may not have demand (checking) accounts, the complications identified in #5 above may not arise.

7. Local cash-to-business volume ratio: cbv, B-5, p. 46.

   Source: State economic development agency; Bureau of Census, U.S. Statistics of Income, and IRS (Internal Revenue Service), U.S. Corporate Tax Returns. (Selected years)

   Comment: The ratio reflects cash held in reserve by businesses as a percentage of total business volume. Since this may vary due to economic conditions, an average cbv may be calculated by averaging cbv ratios for two or more years. If a local cbv cannot be calculated, we will use an updated national figure.

8. Local residential property tax rate: pt, G-1.1.1, p. 51

   Source: Local tax office or planning department.

   Comment: There is no SMSA property tax rate; rather, there is usually a different rate for the various property taxing jurisdictions within the SMSA (general service governments, school districts, and/or other property taxing units.) Institutional employees may reside in more than one taxing district. If reliable data is available from the staff survey, then there is no need to utilize equation G-1.1.1 to estimate property tax payments by employee homeowners. Consequently, there will be no need to identify "pt", "TRA" or "R". (See #11 and #12). However, if there are low response rates to the staff survey or the question dealing with property tax payments, or if reported values appear unreliable, then it will be necessary to utilize equation G-1.1.1 and develop values for "pt", "TRA", or "R". Study coordinators have been asked to examine employee residence to determine how employees are distributed among local jurisdictions and taxing districts. In particular, it will be important to identify the taxing districts in which homeowning employees reside and the number of homeowning employees in those jurisdictions. This can be accomplished utilizing the staff survey, again assuming adequate response to this question.

9. Total Full-time Employees and Full-time Equivalents: Emps, B-5.

Source: Institutional Data Inventory

10. Percentage of employees owning homes locally: h, G-1.1.1, p. 51.

Source: Staff Survey.

Comment: Examine staff survey response rates to determine if the survey can be used to identify percentage of employees owning homes, and reported property tax payments. Even if there are low response rates, we may be able to estimate homeownership and tax payments. If it proves necessary to use equation G-1.1.1, we hope you will not only report residential AV for each of the taxing jurisdictions in which employees reside, but also identify if AV is calculated other than as a percentage of fair market value, e.g., in terms of replacement or original cost.

11. Value of local residential housing: TRA, G-1.1.1, p. 51.

Source: Local tax office or planning department.

Comments: See #8 above. If it is necessary to use equation G-1.1.1, then TRA and R (see #12) must be developed for each local jurisdiction in which employees own homes. (Percentage owning homes and jurisdictions of residence can be determined via the staff survey.)

12. Total number of assessed residences: R, G-1.1.1, p. 51.

Source: Local tax office or planning department.

Comment: R must be consistent with TRA (#11). If the value of residential housing (TRA) includes rental or condominium apartments as well as single family homes, then R must include the total number of apartment units and not simply the total number of buildings with apartments.

13. Business property tax rate (Business inventory tax rate): pt, G-1.1.2, p. 53.

Source: Local tax office or planning department.

Comment: The notation "pt" appeared in #8 above. In many cases, residential property tax rates (#8) and business rates (#13) are identical. However, this may not be so or business rates may be different from residential rates in some but not all local jurisdictions. In addition, pt may vary for plant, equipment, and inventory (see #2 above). While we sought to escape assembling data on jurisdictions that tax employee residential property, you will have to assemble data on business property tax rates for all jurisdictions in the SMSA that tax business property. Contact Doug Smith. See #3 above.

14. The percentage of locally generated sales tax revenues retained locally: st, G-1.2, p. 54.

Source: State tax office; local tax office.

Comment: Sales taxes may be imposed by the state, by all or some local jurisdictions, or both. "st" is the percentage of sales tax revenues retained, not the sales tax rate. If a local jurisdiction assesses a sales tax and all revenues are retained, then st = 1. If sales tax rates or percentage revenues retained locally vary by taxing jurisdictions within the SMSA, then it may be necessary to determine a TBV for each of the counties (and the city if it is not covered in county data). In this case, you would list all jurisdictions whose TBV values were aggregated to derive the SMSA-wide TBV and also cite the sales tax rate in each jurisdiction and st, the percentage of revenues retained locally. If there is a variance in the type of sales that are taxed, this should also be noted.

If the sales tax is collected by the state, it may be returned on a formula basis to the localities or become a part of the state's general revenues. If the former, then a separate st should be cited for the state. If the latter, then it will be necessary to consult local experts on your state's tax policies. Contact Doug Smith should sales taxes vary within the SMSA.

15. Sales tax revenues generated locally: STR, G-1.2, p. 54.

Source: State tax office; local tax office (retail sales tax divisions).

Comment: STR may be any combination of the following: state, local, both state and local, and bi-state. For each case, related STR and st values should be listed together by local jurisdiction and state. Where st = 0 this should be noted. Separate local STR values should total the SMSA-wide STR.

16. Total income tax revenues retained by the local jurisdiction: TYT, G-1.3, p. 55.

Source: State or local fiscal officer.

Comment: Income taxes may be imposed by the state, by all or some local jurisdictions or both. In addition, a locality may charge a commuter tax on the earnings of non-residents as well as tax the income of residents. Finally, the state may collect income tax and return a portion of it to the local jurisdiction in which the tax payer resides (or, the locality may "piggy back" its tax on the state tax). Similar to #14, if the income tax rate varies -- either "piggy back", percentage returned by the state, commuter versus resident or by local jurisdiction -- then it will be necessary to list each jurisdiction's retained income tax revenues, distinguishing tax revenues paid by commuters for those counties with both commuter and resident income taxes.

Please also list income tax rates for the taxing jurisdictions in which employees reside including "piggyback" taxes, commuter taxes and the state tax if the state is required to return a percentage to each jurisdiction. The percentage revenues retained by the local jurisdiction should be noted if less than 100%.

17. Total local households: HH, G-1.3, p. 55.

Source: Local or regional planning department.

Comment: Identify total local households. If there is a commuter tax, then a separate HH will be required indicating the number of local households paying the commuter tax rate.

18. State per pupil educational grant to the local community: SE, G-1.4.1, p. 57.

Source: State education agency; local fiscal officer; local school agency fiscal officer.

Comment: As stated in the model user manual, it is supposed that SE is a grant per pupil and the grant is the same for each local jurisdiction. This may not be correct and the grant may vary, in which case SE should be cited for each school district in the SMSA. Or, it may be possible to construct an SE value for each school district by dividing state aid for regular programs (as opposed to special education) by total enrollment in each school district.

19. Other state revenues attributable to the institution and its employee households (provided solely on a per capita basis): OR, G-1.4, p. 56.

Source: State fiscal agency; state planning department; local fiscal officer.

Comment: If OR is treated like SE -- per capita aid to educate the public school children in employee households -- this requires that individuals in employee households eligible for aid be identified. But OR may refer to per capita aid not directed at persons with special needs but rather jurisdictions as a whole. For example, state revenue sharing may be provided on a per capita basis or per capita aid provided for roads or other services used by the entire local population. If aid is forthcoming on other than a per capita basis, it may be possible to construct OR by listing state aid to services in the SMSA that can be utilized by all residents, then dividing by the local population. Again, this may have to be done separately by county.

20. Local operating budget excluding public school costs and non-locally generated revenues: B, G-2.1, p. 59.

Source: State local government agency report on local government finances; local fiscal officer.

Comment: The local area is the entire SMSA. There will be a B value for each local jurisdiction within the SMSA where institutional employee households reside. You will have to assemble total operating budgets for all jurisdictions in the SMSA for which you will have information from the employee survey. If there are scores of incorporated municipalities, you should strive for all major jurisdictions in which staff reside (contact Doug Smith). Exclude from all local operating budgets the cost of public schools as well as all non-local revenues. Do not include non-recurring costs. Non-local revenues include federal and state aid.

21. Total local population: POP, G-2.1, p. 59.

Source: State planning department; local or regional planning department.

Comments: This should be provided for each of the jurisdictions included in #20, with each jurisdiction's POP listed separately.

22. Local public school operating budget, excluding revenues from non-local sources: SB, G-2.2, p. 61.

Source: Local school agency fiscal officer.

Comment: The comments to #20 above apply here as well. Cite budgets for all school districts in which employees have enrolled children. Exclude revenues from non-local sources.

23. Number of children in employee households attending public schools: C, G-2.2.

Source: Staff Survey

24. Total number of persons in staff households: EHH, G-2.1.

Source: Staff Survey

25. Total enrollment in local public primary and secondary schools: TC, G-2.2, p. 61.

Source: State education department; local school agency.

Comment: Data should be provided for each school district in which employees have enrolled children.

26. Value of all non-school local governmental property: GPm, G-3, p. 62.

Source: State tax (assessment) office; local tax (assessment) office.

Comment: The values for these items may be in costs today of replacing governmental property or the original cost of these facilities expressed in current dollars. Cite convention used in lieu of fair market value by local assessors.

27. Value of all school-related governmental property #2: GPs

Source: State tax (assessment) office; local tax (assessment) office.

Comment: The value for these items may be in costs today of replacing governmental property or the original cost of these facilities expressed in current dollars. Cite convention used in lieu of fair market value by local assessors.

28.. Assessed value of institutional tax-exempt property: AV, G-4, p. 63.

Source: State or local tax (assessment) office.

Comment: An assessed value must be identified for all institution owned or rented tax exempt property. Cite the jurisdiction assessing the property and the method utilized if other than fair market value -- e.g., replacement cost or original cost in current dollars. The jurisdiction's assessment ratios and business property tax rates should also be noted here if not already cited in providing values for #3 and #13. If a property is owned by the local jurisdiction -- e.g. municipal museum -- please note this.

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APPENDIX E

Sample Calendar Instructions

THE JOHNS HOPKINS UNIVERSITY
CENTER FOR METROPOLITAN PLANNING AND RESEARCH
BALTIMORE, MARYLAND 21218

TO:

FROM: Doug Smith

RE: Sample Frame Documentation

DATE: July 3, 1979

Enclosed you will find "calendars" from each of the institutions participating in your audience study. Each calendar has been filled in with the local* performance/exhibition information for all events that took place at that institution during the sampling period. Also, each day that sampling occurred has been marked.

For the purposes of documentation, the sampling period is defined as the time span that includes the opening night (day) of the production/exhibit that precedes the first event sampled thru the closing night (day) that follows the last event sampled.

We would like you to verify this information. In addition, we would like you to make additions/deletions of performances/exhibitions in those instances where we do not currently know of schedule changes or whether other performances/exhibitions were held. Unless this is done, we will not be able to make any final decision as to the representativeness of the sample. We need your prompt attention to this matter, so that we can return your audience studies to you. The managers of the various institutions should be able to assist you in this matter.

Even for the events that were not sampled (but did occur during the sampling period), it is imperative that we know the total attendance for these events. Please write this information in the appropriate "day-block," with the name and type of performance. An example is given on page two.

In cases where only a handful of performances are given over the entire season, they should all be listed. This may require a separate sheet attached to the calendar.

* Local, as usual, means in SMSA

TO:
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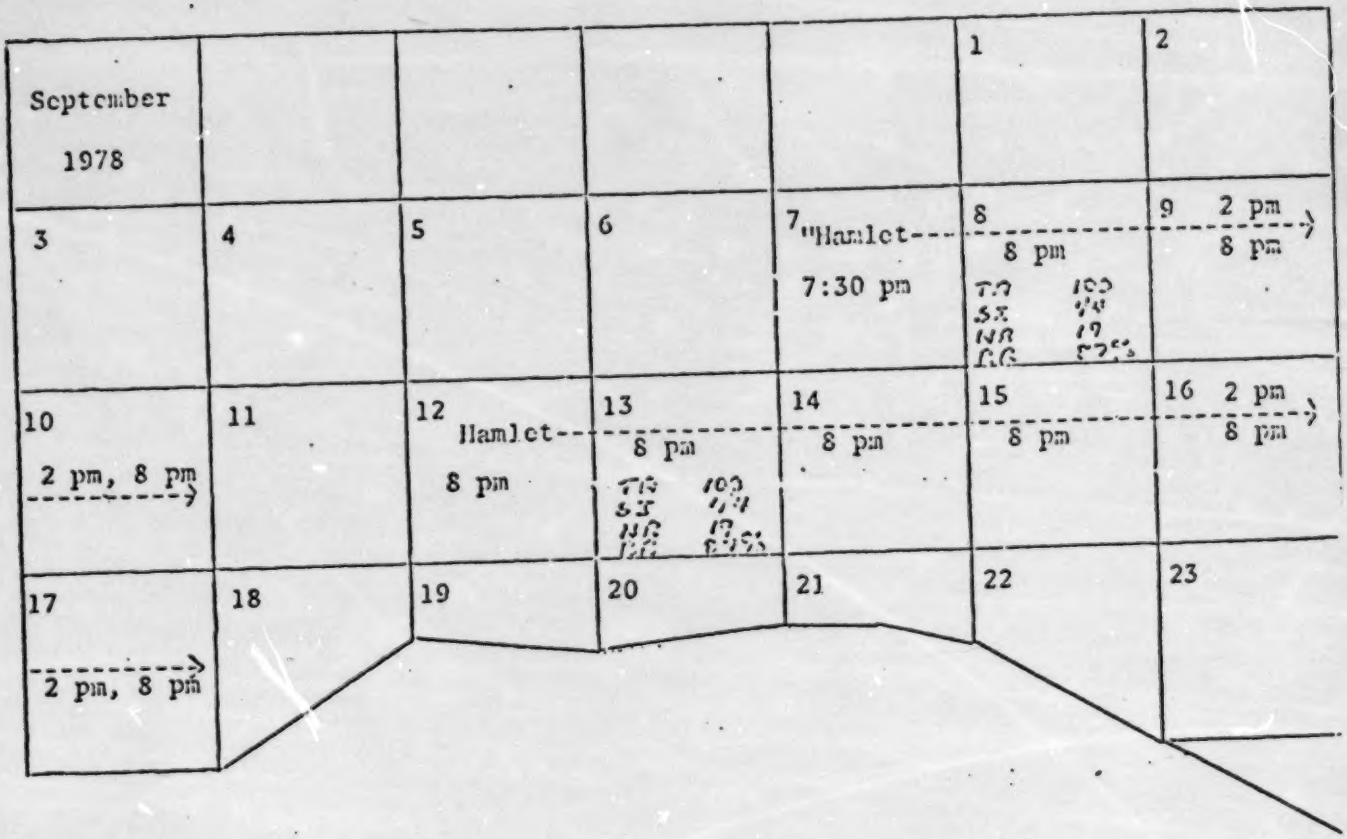
Example: The Repertory Theatre (XX)



Key: TA = total attendance

SI = sampling interval used

NR = number of questionnaires returned

RR = response rate (raw)

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In the example, we see that "Hamlet" opens on the 7th -- the start of the sampling period. The first event sampled is the 8th. The last event sampled is the 13th and the closing night is the 17th. You would verify that these dates and times are correct, add or delete performances as necessary, and fill in the total attendance figures for the 7th, for both shows on the 9th and 10th, for the 12th, 14th, and 15th, and both shows on the 16th and 17th.

It should be noted that we have provided calendars for six (6) months. Only the months that cover the applicable sample period need be filled in.

When you return the calendars to us, please include any performance calendars that the institutions distribute. If you have any questions, please feel free to call.

Thank you.

cc: David Cwi

Attachments

BEST COPY AVAILABLE

APPENDIX F

Documentation Protocol

THE JOHNS HOPKINS UNIVERSITY
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BALTIMORE, MARYLAND 21218

Documenting Data Collection Efforts

The six city project has involved a number of data collection tasks. Except for the community data inventory, all efforts have focused on individual institutions -- their audiences, financial and operating characteristics, and staff households. As part of an overall evaluation of data quality, we are seeking to document various aspects of data collection and data handling.

Much of the information needed has already been provided, e.g., the Survey Event Report Forms. The aspects of data collection that particularly concern us now involve the organization, management and execution of tasks. We are especially concerned with the identification of the practices that were adopted for most of the studied institutions and circumstances that led to different practices on the part of individual institutions. This information can help us to identify the extent to which differences or similarities might be due to the data collection procedures as well as identify potential impacts on data quality.

If you are aware or suspect for any reason that data quality varies by institution -- e.g., some institutions did not seriously attempt to identify local expenditures -- please identify the institutions and the reason for your suspicion.

Please read over the attached documentation issues and contact Doug Smith if you have any questions. We hope that this last task is not too burdensome and that it can be completed within the next two weeks.

GILMAN HALL, HOMEWOOD CAMPUS - TEL. AC 301 - 338-7174

1) Audience Survey

(a) Completed and "cleaned" SERF's

(b) Distribution and Collection:

-- Was the same person responsible for supervising the distribution and collection of questionnaires at every institution, or did this vary by institution? Was the same person responsible within individual institutions? How was this person trained?

-- Did the same group of people distribute and collect at each institution? Who were these people? Ushers? Other volunteers? Arts Agency staff? How were they trained?

-- What constraints were imposed, either by the institution-type or the management? (Be sure to discuss problems such as underestimated attendance or large numbers of ineligible respondents.)

-- Did the study coordinator participate in the physical handout/collection process? If so, what portions, and to what degree? (Be sure to fully describe the relationship between the study coordinator and surveying personnel.)

-- What is the study coordinator's opinion of the survey procedures? Did the process vary by institution? (e.g., questionnaires distributed in programs instead of separately, announcement from the stage at some places and not at others) Were staff trained prior to distributing and collecting questionnaires?

-- Essentially, how was the process organized and monitored and what improvements could be made?

(c) Editing:

-- Was the same person responsible for supervising the editing of questionnaires at every institution, or did this vary by institution? Was the same person responsible within individual institutions?

-- Did the same group of people edit the questionnaires for each institution? Who were these people? Volunteers? Institutional staff? Arts Agency staff?

-- How were the editors trained? By whom?

-- Did they have any difficulty understanding the editing protocols provided by the Metro Center? What improvements, if any, could be made on these protocols?

-- How much time, on average, did it take to edit one questionnaire?

(d) Complete documentation of sampling frames. You will receive a calendar for each institution. It will show all the events in the sampling period, of which we are aware, and indicate those sampled. In many cases, this information will be complete, and you need only verify it. In other cases, it will be necessary to fill in performances that are not listed. Specific instructions will accompany the calendars.

(e) Was the keypunching verified?

2) Staff Survey

(a) Distribution and Collection:

-- Who handed out and collected surveys?

-- What is the study coordinator's opinion of the quality of the survey procedures and on what facts is this opinion based?

-- What constraints were imposed, either by the institution-type or the management?

-- Did the study coordinator participate in the physical handout/collection/edit process? If so, what portions, and to what degree?

-- Essentially, how was the process organized and monitored and what improvements could be made?

(b) Editing:

-- Who edited the surveys?

-- How were they trained?

-- How much time did they spend?

3) E.I.S. Data Inventory

-- Did one person meet with all institutions, or did several persons each meet with several institutions?

-- Were the inventories completed by someone at the institution or were they completed jointly with the study coordinator or someone designated by him/her.

-- Who supplied the information?

-- Were the same procedures used for each institution?

-- What constraints were imposed on this process (if any)?

-- What is the study coordinator's opinion of data quality? (Cite the reason for your judgment.) Please review problems in gathering data.

4) Annotation of Auditor's Report on Budget Summary:

-- Did one person meet with all institutions, or did several persons each meet with several institutions?

-- Who supplied the information?

-- Was it the person most familiar with accounts payable?

-- How much time did they spend?

-- What is the study coordinator's opinion of the quality of the data? (Cite the reason for your judgment.)

-- Was the same procedure applied to every institution?

-- What constraints were imposed on this process (if any)?

-- Was the person who provided the data asked to name local suppliers, or was their estimate simply accepted without challenge?

---.Did the study coordinator personally participate in the review of each item or was he only able to request information which was supplied at a later date?

5) Community Data Inventory:

(a) If completed properly, the Community Data Inventory should include an appendix of sources, references and comments about the data. Please review problems in gathering data, special tabulations that might have been required, etc.

6) Adjustment for Touring out-of-SMSA:

(a) The E.I.S. Data Inventory asks for various kinds of attendance figures. However, we need an estimate of the total attendance at performances/exhibitions in the SMSA, for each institution, including touring activities within the metropolitan area. Please forward this data as soon as possible, distinguishing main facility from other sites. It should be noted that all touring out of the SMSA would be excluded, as would performances given in schools. It would include attendance at the institution's main facility as well as attendance for tours in the SMSA.